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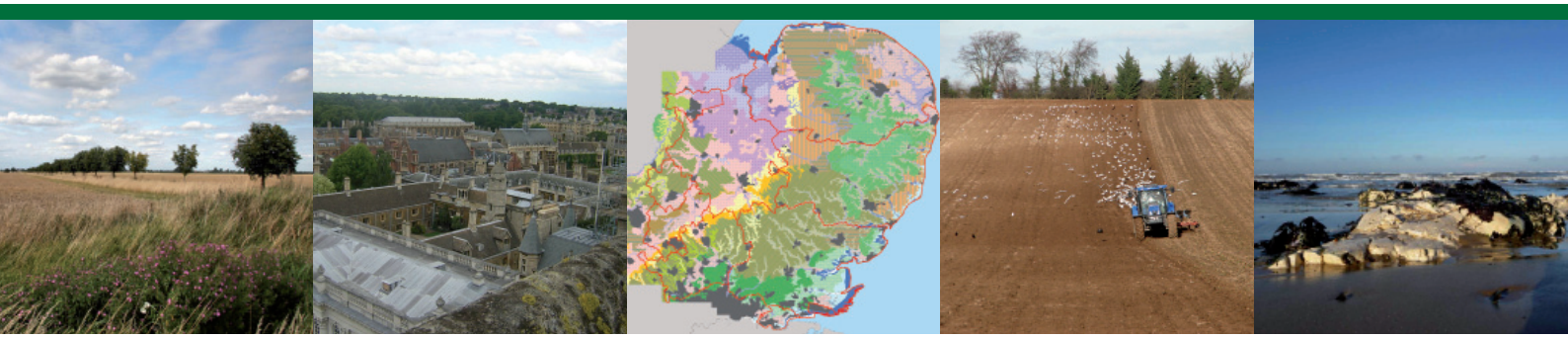

East of England Regional Landscape Framework

Stage 2B – Production of final refined Landscape typology

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Final Refined Regional Landscape Typology
December 2009

EAST OF ENGLAND REGIONAL LANDSCAPE FRAMEWORK

STAGE 2B

Production of a final refined Landscape typology

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1.0 Introduction

1.1 This report sets out the work undertaken to draw together a final refined landscape typology for the East of England. The aim of the study has been to develop a consistent, region-wide *integrated* landscape typology for the East of England that could be used ain an integrated framework for rural decision making. The typology was required to be a structured, spatial framework for describing and evaluating the countryside, capable of operating at different levels of resolution.

1.2 The fundamental building block of such a hierarchy at the landscape level is the ***Land Description Unit*** (LDU for short). LDUs are distinct and relatively homogenous units of land, each defined by a series of ***definitive*** attributes, so called because they define the extent of each spatial unit. There are four definitive attributes at the regional (1:250,000) and eight at the local (1:50,000) scale. These encapsulate both the underlying natural (***landform*** and ***ground type***) and cultural (***landcover*** and ***settlement pattern***) dimensions of the landscape.

1.3 The process of LDU mapping and subsequent characterisation with other descriptive data enables broad patterns to be distinguished, which in turn makes it possible to begin to understand the relationship between the many factors that contribute to landscape character. This explains why the LDUs defined by the process of overlay mapping can be used as a basis for defining *Landscape Character Types*.

1.4 The study to develop an integrated landscape typology began in 2008 and has involved 4 linked stages of work:

Stage 1a - Defining a draft landscape framework (report Aug08) involving a GIS based LDU analysis.

Stage 1b – Production of a Landscape typology (report Feb09) using the LDUs, along with existing character assessments, local knowledge and consultation, to develop a regional landscape typology and associated written descriptions. This typology had been consulted upon and was endorsed for use by the Regional Landscape Forum at its meeting on 19 Jan 2009.

Stage 2a - Updating the LDU framework using HLC data (report Jun09) by developing a regionalised historic landscape characterisation that could be linked to the LDU data and used, following the approval of Historic Environment leads within the region, to inform the integrated regional landscape typology.

Stage 2b – Production of an integrated Landscape typology (current report) to incorporate data from the HLC, biodiversity, rural settlement and urban landscape types, as a focus for refining the landscape typology, incorporating consultation comments and further developing the written descriptions in a structured way.

1.5 The following sections of this report refer to the key tasks undertaken as part of Stage 2b and the detailed outputs from this work can be found in the appendices. Following some minor additional research and further consultation, the aim was to produce a final integrated Regional Landscape Typology, backed by secure client and partner agreement, to replace the Landscape Typology agreed in January 2009. This was to

involve reviewing the LDU framework in relation to the HLC, regional biodiversity data, and rural settlement mapping (provided by Sheffield University using a similar methodology used for urban/rural definitions) and integrating a draft urban landscape typology within the framework. It also involved the incorporation of all outstanding concerns/ comments relating to the names, boundaries and descriptions of the landscape types, as well as upgrading the descriptions through the incorporation of new historical and biodiversity information.

1.6 It should be noted that where anomalies appeared to exist between the LDU framework and the new data sources, the boundaries of the LDUs were adjusted to better reflect these differences. All changes that were made are listed in both the GIS database and on the hardcopy summary table in Appendix 1 of this report.

2.0 Integration of HLC into the Regional Landscape Typology

2.1 The development of a regionalised Historic Landscape Characterisation (HLC) in Stage 2a has allowed a review of the LDU framework to identify where refinements to the regional landscape typology and boundaries would be beneficial and meaningful. By overlaying an outline map of the Regional Landscape Typology onto the regionalised HLC mapping it was possible to identify anomalies where more in depth study was required in order to improve the typology. A total of 11 areas were identified where changes had to be made (Appendix 2). Most of the changes related to a reclassification of the landscape type and a recoding of the LDU. In places there was also a need to subdivide, or alter the LDU boundaries.

2.2 The regionalised HLC map was also used to review both the Settlement and the Landcover codes held within the LDU attribute table. This checking and refinement has not only ensured compatibility between the HLC and the LDU data, but it has also been used to inform the landscape character type written descriptions (see section 6.0 below).

3.0 Analysis of ecological character data

3.1 A sub-component of the study was to summarise the ecological character of the Landscape Types defined by the Regional Landscape typology. The brief was to consult as widely as possible with county officers, Wildlife Trusts, Natural England and others, to provide consistent information on the 'ecological character' of each landscape type. In the context of this work 'ecological character' was partly defined by differences in the extent of remnant semi-natural habitat and the degree of protection (designated sites) between landscape types, itself a proxy indicator of persistence of seminatural habitat and of quality

3.2 A combination of the necessity to be consistent between counties across the region and time constraints meant that only nationally consistent data sets on designated sites and semi-natural habitats (Natural England Habitat Inventory) could be used for the study. These were available via the MAGIC (Multi-Agency Geographic Information for the Countryside) internet portal.

3.3 The first task was to use the available data on the distribution of key semi-natural habitats to characterise the ecological character of each landscape type. The

distribution of the key semi-natural habitats (Intertidal mudflats; Reedbed; Ancient woodland; Lowland mixed deciduous woodland; Wet woodland; Neutral grassland [lowland meadow]; Lowland calcareous grassland; Coastal/Floodplain grazing marsh and Fenland) was superimposed on the map of landscape types. Knowledge of the physical and cultural patterns that characterise each landscape type, combined with the extent and distribution of typical semi-natural habitats associated with that type, provided consistent, region-wide information. Secondly, the level of designated sites (SAC, SBA, NNR, SSSI, Ramsar sites) was used. This information was compiled as a table by landscape type (Appendix 3) and this was then used to inform the description of that type.

3.4 The ecological character of each landscape type was then mapped as a function of all Priority Habitats and designated sites. The method employed was similar to that developed for the original Biodiversity Opportunity Map for the East of England (Land Use Consultants & Terra Consult 2005), but the mapping is at the finer resolution (1:50,000) of the Level 2 Land description units. This information was used to inform the landscape character type written descriptions (see section 6.0 below).

4.0 Rural Settlement Analysis

4.1 Work was carried out by the University of Sheffield, using their settlement morphology grid and associated database, to explore the feasibility of summarising the settlement structure of each of the Regional landscape types in the East of England. The settlement morphology grid used in this analysis reflects the entirety of current settlement (or of dwellings), rather than emphasising the traditional features and historic roots of settlement patterns defined by the LCTs. The study sought to summarise the settlement characteristics of each LCT by overlaying the LDU framework on a hectare grid encapsulating the current form of settlement (if any) in each cell. A measurement was made of the mix of settlement types and the size of nucleations in each LCT by reference to the proportion of hectare cells assigned to each settlement type and the proportion of households assigned to each settlement type.

4.2 This information was used to inform the landscape character type written descriptions (see section 6.0 below).

5.0 Development of Urban Landscape Types for key settlements

5.1 A method of classifying the region's main urban areas at a regional scale was also developed. A total of 28 settlements were initially identified for study, based on the urban areas identified when mapping LDUs for the regional landscape framework. These were then cross referenced with the Regional Spatial Strategy and any other settlements likely to experience change were identified. In general major settlement centres from ports and new towns through to smaller market towns were selected for study and these were then grouped into 10 settlement types depending on their historic evolution and predominant present day character. The purpose of the exercise was to provide an overview of landscape character in settlements which could be used as a starting point to inform future assessments such as Green Infrastructure strategies and decision making on growth, both in terms of the extension to existing settlements as well as the creation of new settlements.

5.2 Each settlement was analysed using current OS maps, existing townscape studies and publicly available literature to classify the main components of the settlement and to summarise the defining characteristics as a series of bullet points. The purpose of these descriptive bullet points was to encapsulate the special qualities of the settlement, its key characteristics and therefore its local sense of place. In future there is scope for these descriptions to be developed more fully with the aim of informing future decision making and development change. For example, further information could be added on the built character of a settlement, predominant townscape types and vernacular architecture, as well as the nature and character of the urban edge and peri-urban areas.

5.3 A total of 50 individuals/organisations within the region were consulted on the draft settlement list and descriptions. Following consultation the settlements of Derham, Wymondham, Haverhill, Sudbury, Newmarket and Dunstable were added and Swaffham was removed, bringing the total number of settlements considered to 33. A separate report detailing the results of this study can be found in Appendix 4 of this report.

6.0 Creation of a new data structure for descriptive text

6.1 Alongside the upgrading and revision of the framework, a separate piece of work involved the creation of a new text data structure to hold information about each of the emerging landscape character types. This needed to receive both the existing text from the agreed Jan 09 typology and the new data being generated from the HLC, regional biodiversity and rural settlement mapping, but it had also to be able to integrate and display this data in a structured and easy to read format. The structure of this new database is shown in Appendix 5. Following the creation of a new text data structure, the next step was to review all the text for each of the emerging LCTs, de-jargonise it and where possible, to fill in gaps.

6.2 Final written descriptions for each of the landscape types can be found in Appendix 5 of this report.

7.0 Consultation on refinements to Integrated Landscape typology

7.1 The draft written descriptions from the original regional typology were reviewed by inviting key individuals and organizations within the region to engage in the consultation process. A conference/workshop was then held on the 20 October 2009, where the new draft integrated landscape typology map and descriptions were made available for comment. Although there was broad agreement with the simplified typology, a series of comments were received, including requests to further simplify the typology, review the location/distribution of types, alter naming and refine the draft descriptions. These comments were taken on board where appropriate and feasible.

7.2 Consultation highlighted the need to ensure type naming reflected derivation from LDUs, as well as reflecting the character of the landscape as experienced within the Eastern Region. There was some misunderstanding of certain words that were used in the naming process. However, all of these words were derived from the underlying LDU framework and they have specific meanings:

Sandlands: Impoverished soils which are light and free draining. They can be loamy or sandy and may occur over soft permeable rocks (e.g. sandstone), or sandy drift.

Claylands: Fine textured sedimentary (Mesozoic & Tertiary) rocks and unsorted clayey till with fragments of chalk, giving rise to heavy, often poorly draining land associated with base rich clayey soils.

Estateland: Agricultural areas with estate plantations, parkland and belts of trees and where settlement is restricted to small estate villages and estate farms.

Settled: A moderate to high density of settlement scattered throughout the landscape.

Village: A strongly nucleated pattern of settlement concentrated in village/hamlets.

Planned: Sparsely settled rural landscapes characterised by isolated farmsteads and occasional rural dwellings.

7.3 The amendments also resulted in the merging of four LCTs into similar/adjoining types. These included the following:

Chalk Slopes and Ridges – merged with and described as a feature within Rolling Chalk Hills

Estate Sandlands – merged with Plateau Estate Farmlands

Wooded Farmlands – merged with a variety of adjoining LCTs, including Lowland and Valley Settled Farmlands

Coastal Settled Farmlands – merged with Lowland Settled and Lowland Village Farmlands

7.4 One new LCT, named Broadland Marshes, was added to the list, as it was felt that the extensive area of grazing marsh in the lower part of the Norfolk Broads did not display the character of a Coastal Levels LCT. Neither was it a Valley Meadowlands landscape.

7.5 Reference to the comments made by the Counties and the use of personal knowledge of landscapes in the region, were also used to assist in making judgments on changes to type names. This was to ensure that the names were meaningful and that they highlighted the visually prominent characteristics of each type. The names that were altered included the following:

Rolling Chalk Hills – changed to Chalk Hills and Scarps

Wooded Estate Sandlands – changed to Forested Estate Sandlands

Estate Farmlands – changed to Lowland Settled Farmlands

Wooded fen – changed to Wooded Peat Fen

Planned Fen – changed to Planned Peat Fen

Planned marsh – changed to Planned Silt Fen

7.6 Full details of the changes made to the landscape typology following consultation and the integration of new data can be found in Appendix 6.

8.0 Adjustment to Map graphics

8.1 Consideration was given on how to improve the A3 and A4 hardcopy printouts of the LCT map, for the benefit of both people and printers. The existing Landscape Character Types map displays both crosshatching (representing woodland cover) and dots (representing settlement type) over a colour base (representing geology and soils). In this system, broad families of types have been given particular colour ranges e.g. Chalk/Limestone Landscapes were given a 'yellow range', while Heavy Clay Landscapes were given a 'green range'. This assists with quick referencing. The shading symbols have also been used in a consistent way such that broad vertical or horizontal hatching reflects estate landscapes, while fine diagonal hatching reflects ancient wooded landscapes and stippling reflects differences in settlement pattern. This map was simplified and the colour contrast adjusted slightly to improve the distinction between different LCTs. To fulfill specific requests for a colour map without crosshatching, however, a second colour only map was also created, using a similar colour scheme to that used in the original map. This enabled CCG to look at both maps (Appendix 7) and to choose which version to work with.

Appendix 1: Changes to LDU framework (New LDUs/boundary edits)

Limestone Village Farmlands - LDU 766 joined to 827 and part 1257.

Estate Sandlands - LDU 1695 expanded and redefined

- LDU 1702 joined to part 1703

Wooded Plateau Farmlands - new LDU (339) in Herts.

- extend LDU 1646 into 831 and 1257

Plateau Estate Farmlands - LDU 1469 joined to 1209/1386 and changed from Wooded ***Plateau Farmlands***

- LDU 1424 joined to part of old 1417
- LDU 1417 reduced and redefined
- LDU 1533 joined to part of old 1634
- LDU 1634 reduced and redefined

Estate Farmlands - LDU 256 joined to part 334

- LDU 1375 joined to 1418 and changed from Valley Settled ***Farmlands***
- LDU 1359 joined to part of old 1417

Valley Settled Farmlands - LDU 1469 joined to 1209/1386 and changed from Wooded ***Plateau Farmlands***

- adjust boundary of LDU 973
- LDU 1222 joined to 582

Lowland Settled Farmlands - LDU 1249 joined to 700 and changed from Lowland ***Village Farmlands***

- LDU 68 joined to 71 and changed from Valley Settled ***Farmlands***
- LDU 328 joined to 282 and changed from Wooded Hills & ***Ridges***
- LDU 700 joined to 1249 and changed from Wooded Plateau ***Farmlands***
- extend LDU 972 into 973 and change from Lowland Settled ***Claylands***

Wooded Hills & Ridges - new LDU (1662) in south Essex

- LDU 133 joined to 256/334 and changed from Estate Farmlands
- LDU 543 joined to part 541 and 942

Wooded Plateau Claylands - new LDU (1713) in south Norfolk to become Settled ***Plateau Claylands***

- new LDU (572) in northeast Essex, including old 572, 576, part 577, 578, 579, 1238
- new LDU (578) and redefine extent of remaining LDU 577
- extend LDU 580 into 578, 579, 670
- extend LDU 1508 into1550
- extend LDU 1694 into1695
- LDU 1685 joined to 1513 and 1686

Lowland Settled Claylands - LDU 946 joined to 605

Coastal Levels - new LDU (597) in northeast Essex, including old 573, 597, 976

Urban - 3 new LDUs (280, 538, 1711) in south Herts/Essex

Deleted LDUs

SW Herts	71, 97, 334
NE Essex	541, 573, 575, 576, 579, 581, 585, 586, 605
Peterborough	803
Bedfordshire	827, 831
NE Essex	970, 976, 1237, 1238
Waveney Valley	1209
Bedford	1250, 1257, 1265, 1266
NE Norfolk	1418
NW Norfolk	1434

Appendix 2: Integration of HLC into Regional Landscape Typology

Area 1
The main anomaly is an arc of land in the centre of the region, on the edge of the East Anglian plateau, which includes a series of 5/6 separate LDUs extending from Saffron Walden in the south west to the western outskirts of Bury St Edmunds. However, this is an area of nucleated settlement, distinguished by the HLC as a zone of 19th century enclosures. These units should be changed to Wooded Village Farmlands.

Area 2
Great Barton area. The nucleated settlement zone extends to the northeast of Bury St Edmunds, where it is classified as Plateau Estate Farmlands. Again, the HLC identifies 19th century enclosures in this area. No change recommended. However the area of Estate Farmland to the south is a continuation of the plateau landscape and should therefore be changed to Plateau Estate Farmlands.

Area 3
Cottenham/Waterbeach area. Currently classified as Lowland Village Farmlands. HLC identifies part of this area as common grazing land/fen. Extend Planned Fen into this area.

Area 4
Mildenhall area. Currently classified as Wooded Estate Sandlands. HLC identifies this area as 19th century enclosures. This area contains nucleated villages and considerably less plantation woodland than found in the Wooded Estate Sandlands to the east. Change to Lowland Village Chalklands.

Area 5
Swaffham area. Currently part of a larger area of Wooded Estate Sandlands, within which HLC identifies 19th century enclosures and areas of common grazing to the south and west, associated with a high concentration of plantation woodlands. Retain these areas as Wooded Estate Sandlands. To the east of Swaffham, however, where the land forms a clay plateau with Brown soils, the HLC shows estate farmlands. Change this area to Plateau Estate Farmlands. To the north west of the settlement there are also 19th century enclosures from both arable land and waste, with linear woodlands and belts of trees. Change this area to Estate Sandlands.

Area 6
Gayton and Middleton area. Currently classified as Plateau Estate Farmlands. HLC identifies this area as 19th century enclosures with nucleated villages. Change to Lowland Village Farmlands.

Area 7
Grimston area. Currently classified as Wooded Estate Sandlands. HLC identifies this area as 19th century enclosures with nucleated villages. Change to Lowland Village Farmlands.

Area 8
Hunstanton area and along coastline to Holkham Park. Currently classified as Plateau Estate Farmlands and Estate Sandlands respectively. HLC identifies a nucleated settlement pattern

with 19th century enclosures. At Holkham the pattern of coastal villages is apparent despite the estate influence. Change both areas to Coastal Settled Farmlands.

Area 9
Area west of Holt. Currently classified as Plateau Estate Farmlands. HLC identifies 19th century enclosures and areas of common grazing, but only the southern section has a high concentration of ancient woodland. Change northern part of this area to Estate Sandlands. Also change sloping land on either side of river valley to Wooded Sandstone Hills.

Area 10
Area east of Briston. Currently classified as Estate Farmlands. Area is wooded and forms a continuation of the plateau landscape to the north and to the south. Change to Plateau Estate Farmlands.

Area 11
Area south of Colchester. Currently classified as Lowland Settled Claylands. HLC identifies modified early enclosures to the north and co-axial fields to the south. The northern area is also undulating and contains a relatively high concentration of ancient woodland. Change the northern area to Wooded Hills and Ridges.

Appendix 3: Ecological Character of Regional Landscape Types

	LANDSCAPE TYPE	DRAFT ECOLOGICAL CHARACTER
1	Chalk Hills and Scarps	Some potential for *Lowland Calcareous Grassland* especially on steeper scarp and valley slopes and shallower soils. However, the rolling Downland nature of this LCT has resulted in arable agriculture with minimal survival of PHs and designation at less than 2 percent.
2	Wooded Chalk Valleys	*Ancient Woodland* and small patches of *Lowland Calcareous Grassland* (e.g. road verges) and *Lowland Meadows* are ecologically characteristic. A relatively high proportion of PHs survive (>7 percent) survive in the LCT.
3	Settled Chalk Valleys	The base-rich Brown Soils of this Landscape Type favours productive settled agriculture, with some *Ancient Woodland* survival. The ancient pattern of dispersed settlement also indicates the possible survival of *Ancient Woodland*, fragments of which survive on steeper slopes equal to more than 2 percent overall.
4	Lowland Village Chalklands	The potential for *Lowland Calcareous Grassland* on predominantly Calcareous Brown Soils is mitigated by the moderate relief and fertility of the substrate, favouring arable agriculture. However, fragments of *Lowland Calcareous Grassland* survive and more that 2 percent of the LCT is Priority Habitat, a proportion of which is protected (> 1 percent).
5	Wooded Limestone Wolds	A small unit in the NW of the Region supporting an unusually high proportion of *Ancient Woodland* with some *Lowland Mixed Deciduous Woodland* and, on base-rich soil, *Lowland Calcareous Grassland.* A very high proportion of the Landscape Type, where it occurs in the Region, is extant semi-natural habitat at > 6 percent.
6	Limestone Village Farmlands	Mostly Shallow Calcareous Soils supporting *Lowland Deciduous Woodland*, especially on steeper slopes of this LCT characterised by a ridge and valley

		topography. However, the extent of remnant PHs is low at less than 1 percent which reflects the relatively fertile soils and moderate relief.
7	Wooded Sandstone Hills	A small Landscape Type in the Region characterised by *Lowland Heath* and *Lowland Mixed Deciduous Woodland.* Some degree of protection, especially for heathland sites (> 1 percent)
8	Forested Estate Sandlands	Regular estate plantations are a visual characteristic of this Landscape Type but the glacial drift nature of both the plateau and lowland components are more obviously characterised ecologically by *Lowland Dry Acid Grassland* and patches of *Lowland Heath.* The relatively good survival of semi-natural habitat in this LCT (> 3 percent) is reflected in the degree of protection (> 1 percent).
9	Wooded Plateau Farmlands	A physically uniform Landscape Type characterised by heavy clay soils and the potential for *Ancient Woodland* survival and other woodland, including plantations. A relatively high proportion of the LCF is PH at > 7 percent, although relatively little is specifically protected at less than 1 percent.
10	Wooded Village Farmlands	Wooded character of mostly *Ancient Woodland* on Wet Clayland soils. Good survival of PHs (> 6 percent) of which a considerable proportion is designated (> 3 percent).
11	Plateau Estate Farmlands	The mostly Sandy Brown Soils on elevated topography favours arable farming. Where claylands predominate there are some fragments of *Ancient* and *Lowland Mixed Deciduous Woodland.* The almost complete absence of designated sites in this Landscape Type reflects the long period of settled farmland agriculture.
12	Valley Settled Farmlands	There is potential for *Lowland Meadows* in a landscape dominated by small, non-estate farms on mostly Clayland soils. The settled and mostly arable nature of this

		Landscape Type does not favour the survival of semi-natural habitat (just over 1 percent).
13	Lowland Village Farmlands	An extensive and low lying LCT characterised by wetter clayland soils with the potential to support *Wet Woodland*, *Reedbeds* and *Floodplain Grazing Marsh.* Small patches of all three PHs survive within the LCT but only as a small percentage (< 2 percent).
14	Lowland Settled Farmlands	A variable LCT characterised mostly by Sandy Brown Soils with limited semi-natural habitat remaining. In valley situations, e.g. in Essex, and on wetter, clayland/gleyed soils there is the possibility of *Ancient Woodland* surviving with fragments of *Floodplain Grazing Marsh.* The relative fertility of the LCT on good soils is reflected in the poor survival of PHs (< 2 percent) and the consequent low level of protection (< 1 percent).
15	Wooded Hills & Ridges	A combination of heavy wet clayland and gleyed soils supports *Ancient* & *Lowland Mixed Deciduous Woodland* with some *Lowland Meadows* and *Lowland Calcareous Grassland.* Survival of *Ancient Woodland* is relatively high, much of which is found in large blocks and protected by designated sits (>1 percent).
16	Wooded Plateau Claylands	A physically uniform Landscape Type characterised by heavy clay soils and the potential for *Ancient Woodland* survival especially in valleys dissecting the plateau. A relatively high proportion of the LCF is PH at > 4 percent, although relatively little is specifically protected at less than 1 percent.
17	Settled Plateau Claylands	A uniform Landscape Type characterised by arable farmland on heavy clay soils and fragments of *Ancient Woodland* reflecting small, non estate farms. The settled and gentle nature of the topography with relatively fertile clay soils has worked against habitat survival and a strong ecological character in the contemporary landscape. Less that 0.5 percent of the LCT is semi-natural habitat and there are no designated sites.

18	Lowland Settled Claylands	The predominantly low lying nature of this Landscape Type in the south and east of the region and the clay character of the substrate indicate the potential presence of *Floodplain Grazing Marsh* and *Wet Woodland.* The presence of remaining *Floodplain Grazing Marsh* (almost 3 percent) is reflected in a relatively high degree of protection by designated sites (just under 2 percent).
19	Valley Meadowlands	A widespread Landscape Type found across the whole Region, the low-lying valley topography has the potential to support extensive areas of *Floodplain Grazing Marsh, Lowland Fen* and *Lowland Meadows* and *Wet Woodland.* This potential and the reasonably good survival of PHs in this LCT (2.5 percent) is reflected in a high degree of protection by designated sites (>7 percent).
20	Broadland Marsh	
21	Wooded Peat Fen	A strong ecological character typified by *Floodplain Grazing Marsh* and *Fen.* The survival of PHs is good at almost 2 percent, a large proportion of which is also protected at just more than 1.5 percent.
22	Planned Peat Fen	A remarkably uniform and low-lying LCT characterised by typical fenland soils supporting fragments of *Floodplain Grazing Marsh* but with the potential to support more extensive areas and *Reedbed.* The potentially strong ecological character of this LCT is reflected in the degree of protection afforded, relatively high at > 5 percent.
23	Planned Silt Fen	Mostly *Floodplain Grazing Marsh* on Marine Levels. However, the low-lying nature and relative fertility of this LCT is reflected in minimal survival of semi-natural habitat and levels of protection (< 0.5 percent).
24	Settled Marsh	Mostly *Coastal Grazing Marsh* on Marine Levels. The low-lying and relatively fertility of this

		Landscape Unit is reflected in minimal surviving semi-natural habitat (about 0.1 percent).
25	Coastal Levels	A relatively uniform LCT characterised by extensive *Coastal Grazing Marsh* and, less extensively, *Lowland Meadows.* The ecological importance of *Coastal Grazing Marsh* for breeding waders, for example, is reflected in the relatively high level of protection with just under 5 percent designated.
26	Saltmarsh/Intertidal Flats	The Landscape Type is dominated by Intertidal Mudflats large areas of which remain extant.
27	Coastal Dunes	Dune vegetation
28	Urban	

Appendix 4: Urban Landscape typology report

18 pages of text

Appendix 5: New ILCT database structure

1. Chalk Hills and scarps

Summary description

Location

Physical environment
The shape of the land
Ground type/Soils
Natural / water features

Vegetation and land use
Ecological character
Land use
Tree cover

Historic and built environment
Historical development
Enclosure pattern
Settlement pattern
Building descriptions
Historic features

Perceptual qualities
Visual experience
Tranquility

Appendix 6: Final changes to create Integrated Landscape typology

Chalk Slopes & Ridges - change 14 LDUs in Herts. to ***Chalk Hills & Scarps***

- remove Chalk Slopes & Ridges as an LCT in typology

Rolling Chalk Hills - amend name of 16 LDUs to ***Chalk Hills & Scarps***

Lowland Village Chalklands- change 1 LDU to ***Planned Fen***

Wooded Sandstone Hills - change 7 LDUs in north Norfolk to ***Forested Estate Sandlands***

Wooded Estate Sandlands - amend name of 54 LDUs to ***Forested Estate Sandlands***

- change 1 LDU in Beds (1660) to ***Wooded Sandstone Hills***

Estate Sandlands - change 1 LDU (1145) in Suffolk to ***Forested Estate Sandlands***

- change name of 11 LDUs in Norfolk to ***Plateau Estate Farmlands***
- change 5 LDUs (1433,1500,1501,1528,1529) to ***Chalk Hills & Scarps***

Wooded Plateau Farmlands - change 1 LDU in Beds (705) to ***Lowland Village Farmlands***

- change 2 LDUs (805,806) to ***Wooded Plateau Claylands***

Plateau Estate Farmlands - change 1 LDU in Essex (971) to ***Wooded Plateau Farmlands***

- change 2 LDUs (1351,1695) to ***Forested Estate Sandlands***

Wooded Farmlands - change 12 LDUs in East Anglian plateau to ***Valley Settled Farmlands***

- change 23 LDUs in a variety of places, outside main East Anglian plateau, to ***Lowland Settled Farmlands/Estate Farmlands***
- change 3 LDUs on Fenland fringe to ***Lowland Village Farmlands***
- change 1 LDU in Beds. to ***Plateau Estate Farmlands***
- change 1 LDU in Herts. to ***Wooded Hills & Ridges***
- remove Wooded farmlands as an LCT in typology

Estate Farmlands - change 41 'valley' LDUs in East Anglian plateau to ***Valley Settled Farmlands***
- change 7 'plateau' LDUs in East Anglian plateau to ***Plateau Estate Farmlands***
- change 1 LDU in Herts. to ***Settled Chalk Valleys***
- amend name of remaining 17 LDUs to ***Lowland Settled Farmlands***
- remove Estate farmlands as an LCT in typology

Valley Settled Farmlands - change 3 LDUs in East Anglian plateau to ***Plateau Estate Farmlands***
- change 10 LDUs outside main East Anglian plateau to ***Lowland Settled Farmlands/Estate Farmlands and*** 1 LDU to Limestone Village Farmlands
- change 1 LDU in Beds. to ***Limestone Village farmlands***
- change 1 LDU in mid Norfolk to ***Plateau Estate Farmlands***
- change 1 LDU in southwest Essex to ***Urban***
- change 1 LDU (1362) in Norfolk to ***Settled Plateau Claylands***

Lowland Village Farmlands - change 4 LDUs in Bedfordshire to ***Lowland Settled Farmlands***
- change 1 LDU in southwest Suffolk to ***Valley Settled Farmlands***
- change 1 LDU (704) to ***Planned Peat Fen***
- change 4 LDUs (1402,1403,1404,1710) to ***Lowland Village - Chalklands***

Coastal Settled Farmlands - change 9 LDUs along north Norfolk coast to ***Lowland Village Farmlands***
- change 7 LDUs along east Norfolk coast to ***Lowland Settled Farmlands***
- remove Coastal Settled farmlands as an LCT in typology

Wooded Plateau Claylands - change 2 LDUs in south Norfolk to ***Plateau Estate Farmlands***
- change 1 LDU in north Essex to ***Wooded Plateau Farmlands***

Lowland Settled Claylands - change 3 LDUs in south Essex to ***Lowland Settled Farmlands***

Valley Meadowlands – change 1 LDU (1477) to ***Planned Silt Fen***

Wooded Fen - amend name of 38 LDUs to ***Wooded Peat Fen***

Planned Fen - amend name of 24 LDUs to ***Planned Peat Fen***

Planned Marsh - amend name of 12 LDUs to ***Planned Silt Fen***

Coastal Levels - create new LCT, called ***Broadland Marshes***, to include 3 LDUs (395, 1642, 1643) in east Norfolk

- change 4 LDUs (1014,1015,1023,1679) to ***Forested Estate Sandlands***
- change 1 LDU (511) to ***Lowland Settled Farmlands***
- change 1 LDU (1581) to ***Lowland Settled Claylands***

Urban - change 1 LDU in southwest Herts. to become ***Lowland Settled Farmlands***

- change 1 LDU in northeast Essex. to become ***Lowland Settled Farmlands***

Appendix 7: New LCT map graphics