# Kilkenny County Development Plan 2008 - 2014

# Appendix C Landscape Character Assessment

Landscape Appraisal of County Kilkenny

Document 1: Landscape Evaluation Document 2: Hypothesis Testing Document 3: Landscape Policies



# Landscape Appraisal

of



# **County Kilkenny**

# **Document 1**

Prepared for Kilkenny County Council

By



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October 2003

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# 1.1.- Terms of Reference

CAAS Environmental Services has been commissioned by Kilkenny County Council to prepare a Landscape Evaluation Report for the county. The document follows the proposal submitted in November 2002, where the work method and the services to be provided are described.

For the purposes of clarity of method, the appraisal has been sub-divided into three documents. This document – 'Landscape Evaluation' forms Document 1 of the Landscape Appraisal Report for County Kilkenny. It is followed by: Document 2 'Hypothesis Testing' and Document 3 'Landscape Policies' (refer to documents for further information).

The final Outputs of the Study will include:-

- A Landscape Character map of the County indicating significant landscape features (units) with accompanying pictures and descriptive text of the extent, boundaries and components of each character unit
- A description of the principal types, issues and trends associated with the principal land uses and settlements in each unit.
- A Landscape Sensitivity map for the County highlighting vulnerable areas and features with accompanying descriptive text.
- A Landscape Policy map for the County to provide guidance for development control and policy development throughout the County.
- Landscape objectives and policy recommendations.

The final output of the Landscape Appraisal will be a series of three transparent and concise documents incorporating the outputs as described above. As part of the evaluation, strong guidelines relating to landscape protection policy measures will be included, with a view to the protection of County Kilkenny landscapes whilst allowing for sustainable development and ensuring a high quality environment.

The Landscape Evaluation Report will examine the above layers of the County's Landscapes and as such is not specific to rural housing. It must be noted that the Landscape Evaluation Report will not include housing strategies and is not intended as a definitive guide to the location of rural housing within the County.

# **1.2.-** Introduction

# 1.2.1.- Legislation, Guidelines, Precedent

Landscapes in Ireland combine important economic, social and cultural roles. Changes due to human activities are seen as an integral part of the landscape, as the cycles of agriculture, housing and history have shaped the Irish landscape. Similarly, the landscapes of County Kilkenny have co-evolved over thousands of years and continue to evolve and change today as a result of human actions and natural forces.

Landscapes evolve as landuses constantly change in response to economic demands. This interaction is made more complex because the aesthetic response of viewers can vary according to their cultural background and indeed may change over time, as a society's cultural sensibilities develop and grow.

Planning and development policies aim to protect views, prospects and amenities so as to look after the major landscape features from changing or being altered and, therefore protect the general appearance of the landscape:

Part IV (7) of the 1<sup>st</sup> schedule (S10) of the Local Government Planning & Development Act 2000, aims: "*Preserving the character of the landscape, including views and prospects, and the amenities of places and features of natural beauty or interest*".

At the heart of this effort lies a highly complex interaction between the landuses which take place in the countryside; the appearance of those landuses when viewed from certain locations and the reaction of viewers to their appearance.

Consequently, the objective of this legislation is faced with difficulties as -

- It seeks to "preserve" (prevent change) a dynamic landscape, which has and will always change.
- It assumes that there are fixed reference points as to what constitutes "features of natural beauty" when in fact these vary from individual to individual and from time to time. This analysis also highlights the legal insecurity of any development control measure such as designations on account of "natural beauty" -, which could limit the development rights. It is inappropriate to think that landscape designations could be legally justified on the grounds of "natural beauty" alone.

The "Guidelines on Landscape and Visual Impact Assessment<sup>1</sup>" give a clear definition of the relationship between visual and landscape impacts given that visual issues are only one small part of a wide range of issues, which contribute to the character or distinctiveness of a landscape. It is stated in the Guidelines that:

"The landscape is not a purely visual phenomenon; it relies heavily on other influences for its character (...) including the underlying geology, the soils, the topography, archaeology, land use, ecology, cultural associations (...), all of which influence the ways in which landscape is experienced and valued"

Similarly, the EPA Guidelines on the information to be contained in Environmental Impact Statements highlight the fact that visual issues are only one small part of a wide range of issues, that contribute to the character of a landscape: -

<sup>&</sup>lt;sup>1</sup> The Landscape Institute, Institute of Environmental Assessment, *Guidelines for Landscape and Visual Impact Assessment*, 1995.

"The topic has two separate but closely related aspects. The first aspect to be considered is visual impacts, focusing on the extent to which new development can be seen. The second aspect considers impacts on the character of the landscape, examining responses that are felt towards the combined effects of the new development. This topic is complex because it encompasses many other impacts such as noise, odours, ecology and history, because attempts to scientifically measure feelings and perceptions are not reliable. Cross references with appropriate specialist topics such as ecology, archaeology and architectural history are very important."

As a result and to solve some of the identified difficulties, the Department of the Environment has prepared *Landscape and Landscape Assessment Guidelines*<sup>2</sup>. The aim of the Guidelines is to heighten awareness of the importance of landscape in all aspects of physical planning and recommends a Landscape Character Assessment method that would help in formulating general Landscape Protection Policies.

The principle behind Landscape Character Assessment is a systematic approach that concentrates, in the initial stages, on identifying homogenous physiographic areas and gradually introduces the more evaluative elements of landscape sensitivity. The guidelines move away from concepts such as factual, sublime, beautiful, etc. and set objective, replicable and equitable criteria for landscape character area designations (see methodology in Section 1.2.2 below and detailed methodology extracted from the Guidelines in Section 2.2.2).

Landscape and scenery are often important considerations in making planning decisions. It is vital therefore, to define clear and objective landscape character areas that would help to provide fair and easily anticipated landscape policies to guide applications and decisions so as to generally protect our surrounding environs. In this way potential landscape impacts can be anticipated and avoided while also ensuring that decisions are more easily understood and accepted. The identification of landscape character areas provides guidance to planners as to how landscape considerations should be dealt with and presents a tool for decision-making.

It is worth noting that the Guidelines *do not directly address specific considerations of streetscape in towns and cities*. The guidelines do not address the issues of layout, height or design of towns and cities.

# 1.2.2.- Purpose, Objectives and Methodology

The purpose of this document is to identify and describe the landscape character of each part of the County. Therefore, the approach to this project has been to assess the landscape in terms of its inherent physical and visual characteristics in close accordance with that recommended in the *Landscape and Landscape Assessment Guidelines* prepared by the Department of the Environment.

Following this, the capacity of each area to accept change – without disproportionate environmental and visual effects in particular– is evaluated and a series of policies to guide developments in each type of landscape are proposed. In other words, Landscape Protection Policies are formulated, so as to protect the general landscape of the County and help in the development plan, control and decision-making process.

The approach to this project has been to assess the landscape in terms of its *inherent* physical and visual characteristics, whilst taking into account some concepts of *hierarchical* or *subjective* value. This systematic approach, follows that suggested in the guidelines where:

<sup>&</sup>lt;sup>2</sup> Landscape and Landscape Assessment Guidelines, Department of the Environment, 2001

'Values attributed to landscapes and judgements involved in the resolution of conflicts or establishment of priorities can be rationally debated and defended with arguments based on evidence, reasons, precedents and consensus.' (Pg. 14)

These concepts were gathered at a workshop session with the identified relevant agencies and organisations within the County, where subjective landscape perceptions were analysed. Regard was had to the information obtained at the workshop session in the preparation of the final landscape characterisations.

The methodology used for the categorisation of County Kilkenny landscapes in this project has been in close accordance with that recommended in the *Landscape and Landscape Assessment Guidelines* prepared by the Department of the Environment. The principle being a systematic approach that concentrates, in the initial stages, on identifying homogenous physiographic areas and gradually introduces the more evaluative elements of landscape sensitivity.

The four-phase methodology used in this project follows the following stages<sup>3</sup>:-

- 1. Identification of Landscape Character Units through the mapping and integration of;
  - Physical units & features (landcover and landform; i.e. soils, geology, landuses, topography, etc.)
  - Appearance (i.e. visual units recognised from site visits and mapping)
  - Characterisation (i.e. historic cultural values, settlement patterns and public perception).

The resultant *Character Units* are then described in terms of their defining landscape characteristics. Boundary determinant factors are then assembled for each boundary of the character unit, and finally, *Critical Landscape Factors* that have a bearing on the relative sensitivities or robustness to development within the unit are identified.

- 2. Determination of **Landscape Sensitivities**, through the classification of physical features such as landuse (based in CORINE) and topography (i.e. ridge lines).
- 3. Designation of **Principle Policy Areas** is achieved by grouping the Landscape Character Units that have similarity of landscape types. In County Kilkenny these principle policy areas have been identified as:
  - Uplands
  - Lowlands
  - River Basins
  - Transition Areas
- 4. **Policy Responses** are then provided for each Principle Policy Area, which recognises the inherent sensitivities and robustness of each area to development.

The precise methodology for each phase it is detailed in Section 2.2.2.

The methodology used for the evaluation involved reference to the following information:-

1. Ordnance Survey Maps scale 1:50,000 (Discovery Series) and 6 inch Maps

<sup>&</sup>lt;sup>3</sup> Note: stages may overlap during the appraisal process

- 2. Areas of High Amenity, Areas of Outstanding Amenity and Areas of Scientific Interest included in the County Development Plan
- 3. The CORINE Land Cover Project.
- 4. 10m Contours Map
- 5. Slopes of Kilkenny Map
- 6. Geology of Kilkenny Map
- 7. Soils of Ireland Map
- 8. Subsoils of Kilkenny Map
- 9. Kilkenny Groundwater Protection Scheme Maps
- 10. Dúchas register of NHAs, SACs, SPAs and Sites and Monuments Record (National Monuments Service).
- 11. Forestry Information Maps
- 12. Land Parcels Map
- 13. Administrative Boundary Maps
- 14. Photographic Views (from site visits)
- 15. Tourist information, including brochures and information on designated walking routes.

#### **1.2.3.-** Limitations and Guidance

The approach applied in this study allows an evaluation of the ability to accommodate development within a landscape, indicating which developments may be most suited, under what conditions and using what design criteria. Therefore, it shall be possible for the Local Authority through the application of the present study, to indicate particular landscape areas, which would be suitable for one kind of development while not being considered for another. These policy responses will correspond to the degree of sensitivity of a particular landscape. The protection of landscape and visual amenities should be suitable for reference in decision making at all levels from countywide policy to site level and may be included in the County Development Plan.

However, it must be noted that the present study is not specific to rural housing and that the Landscape Evaluation Report neither includes housing strategies nor policies, and is not by any means intended as a guide to rural housing.

The criteria applied in this study form the basis of an open-ended system of protection, which can be updated as the mapping of critical resources improves.

# **1.3.-** The Landscape

*'The Landscape'* is a general term used to describe the appearance of the physical environment. It is composed of a complex mixture of natural and man-made elements that can also be an important part of the identity of an individual or a community. The pattern that these elements create can be distinctive to particular areas. It combines important economic, social and cultural roles – as the location of agriculture, housing and history.

The landscape is also the sum of its geophysical parts. Underlying geology, soils, archaeology, topography and ecology have all shaped the visual landscape. As the natural resource base, i.e. flora and fauna habitat, settlement area for towns and villages and the cultural and quality of life indicator, etc., the landscape is an important element of the physical environment.

## **1.3.1.-** Dynamic Landscapes

The landscape is a dynamic entity, which provides a rich record of both past and present activities. Over time, new components are added to the landscape, whilst older features are modified or destroyed. The Irish landscape is the product of a dynamic interaction between culture and nature, where human progress has led to change. Landscapes of County Kilkenny have similarly co-evolved over thousands of years and continue to evolve and change today as a result of human and natural interaction.

The roles of archaeology, settlement patterns, ecology, agriculture, industry, forestry and tourism reflect this dynamic landscape. The landscape is capable of absorbing a combination of such elements, which allow differing landscape units to be established through the use of design, and location. The Irish landscape is a dynamic landscape; one that can combine the cultural, physical and spatial needs of its inhabitants in a balanced way with the demands of the receiving environment.

## 1.3.2.- Landuses and Landscapes

Landuse and the landscape are intertwined. The landscape will shape the type of uses that can be accomplished on the land, whilst land use practices can also shape the landscape. Both landuses and landscapes combine to produce differing character areas. In a mountainous region the landscape is a dominant element – i.e. the raw physical features of the landscape will indicate the character area type. In lowland areas, landuses will typically characterise the area through different uses and identifiable field patterns.

The landscape is characterised by components of a geomorphological nature. Landscape types can be ascertained using knowledge of the geophysical environment – undulating and planar landscapes, river valleys, plateaux, etc. Similarly, a landuse is characterised by a dominant surface, structural and/or historical and vegetation patterns. By examining landuses throughout a region it is possible to distinguish areas such as peat, grass and/or tillage lands. Landuses and landscapes do often interlace providing an area with distinctiveness and/or uniqueness.

## **1.3.3.-** Landscape Stability

It has been established that County Kilkenny's landscapes are dynamic and will continue to change (see Section 1.3.1). However, these changes will be more definite in some areas than in others. It is anticipated that there will be centres of change and centres of stability throughout the County and these will be as follows (see also figure below):

<u>River corridors</u> are likely to change as a result of management strategies for nature protection, amenity, water sports, tourism, etc.

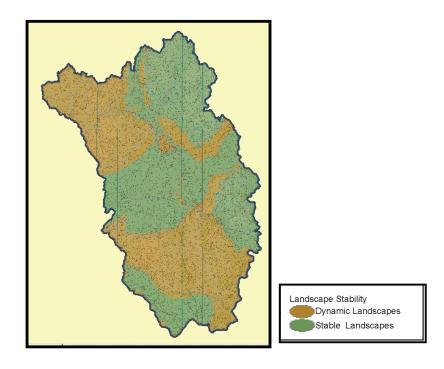
Brandon Hill uplands will most likely not change due to its scenic and amenity designations. Despite the existing forestry practices, the landscape character of the unit as a whole is likely to remain unaltered.

The <u>northerly uplands'</u> landcover, i.e. Castlecomer and Slieveardagh Hills, are likely to change due to the secondary and marginal character of agriculture. Aforestation is likely to become a main landuse in these areas in the future.

The <u>lowland areas</u> are anticipated to continue in use as agricultural lands due to the high quality and fertility of the soils and the importance of agriculture in these areas. Slight changes are anticipated due to intensification of agricultural practices, which are likely to entail the removal of hedgerows. Nevertheless, the landscape character of the area will remain unaffected.

The <u>south-west uplands</u> contain marginal agricultural lands that are likely to be converted to forestry and/ or other land uses.

<u>Transitional landscape</u> areas will certainly change by means of forest plantations, urban and other type of developments.



## 1.3.4.- Managing Change

Landscape policies generally try to control the type and pace of these changes, to maintain the distinctiveness and character of each part of the landscape – either ancient or modern. It is important to note that *human activities - and the changes that they necessitate - are integral parts of the landscape and that landscapes are continuously evolving*. Therefore, landscape policies do not seek to prevent new uses or changes. Instead the policies attempt to manage the change to ensure that the effects of change are fair and proportionate – balancing individual needs against public rights; ensuring that the past remains visible to the future.

#### **1.3.5.-** Landscape Impacts

To ensure landscape quality whilst allowing for indispensable development to happen and to allow human social and cultural evolution, certain measures need to be put in place. It is important to bear in mind the significance and character and context of impacts generated by developments. The following list addresses the significance of landscape impacts caused by different types of developments:

- Significant: Powerlines; Windfarms; Transmission Masts; Quarries; Industrial Buildings; Coniferous Forestry; Housing Estates
- Normal: Roads; Dwellings; Farm Buildings; Infrastructure; Retail; Commercial; Institutions; Educational; Tourism Projects
- Beneficial: Deciduous Native or Naturalised Planting; Amenity and Conservation Projects; Restoration Projects; Sport and Leisure

The capacity of each landscape character area to absorb new development will largely depend on the sensitivity of the landscape factors within each unit. The types of developments listed above will be best suited when considering the robustness and vulnerability of the environmental factor addressed for each landscape character area in Sections 2 and 3.

Developments that are likely to create a significant environmental, and particularly visual impact will be best absorbed in areas where the landscape is robust, i.e. has the capacity to absorb development (see Section 5).

Normal type of developments can be located in *robust* and *normal* landscape areas where the landscape has the capacity to absorb developments, which potentially do not entail significant environmental and visual impacts.

Conversely, developments that are beneficial in environmental terms, will be readily absorbed by any landscape type, although these will be most appropriately suited to sensitive landscape areas where the quality of the landscape would be enhanced.

All developments should however be assessed on a site-by-site basis to avoid, remedy or minimise any potential environmental impact entailed, as the sensitivity of the landscape will vary within the landscape character units (See Section 4).

# **1.4.-** The Landscapes of the County

The rich and varied landscapes in the County of Kilkenny are very much a product of their past. This landscape has been moulded by the first settlers and hunter-gatherer people and continues to do so today. In order to evaluate the present landscapes, it is necessary to examine their formation and origins.

# 1.4.1.- Natural Origins and Processes

There have been seven major periods in early Irish history, which have influenced and shaped our modern landscapes:

- The Mesolithic Period
- The Neolithic Period
- The Bronze Age
- The Iron Age
- Early Christian Settlement
- The Medieval Period
- The Plantation Period

The Mesolithic Period was the first settlement period in Ireland. These hunter/gatherer people encountered a landscape rich in woodlands with hazel scrub, oak, ash and pine and made little disturbance to the natural landscape. The spread of farming occurred with the Neolithic Period. New agricultural methods and burial rituals resulted in changes to the landscape as revealed by pollen analysis.

Burial chambers in the South East were predominately located on glacial sands and gravels in relatively low-lying areas. The first farmers introduced mass forest clearance (pines and elms) and the establishment of tillage and animal rearing land. This clearance lead in turn to the spread of blanket bog (heath).

The Bronze Age heralded further settlement of lowland areas. In County Kilkenny, such settlement patterns are evident from the many *fulacht fiadh* throughout the landscape or from the ancient cooking place on marshy ground at Rathlogan.

Climate deterioration during the Iron Age led to a scarcity of food sources and the spread of upland bogs; poor/wet soils and a pause in tree regeneration. The landscape once again underwent a dramatic change with the consolidation of settlements defended by hilltop fortifications and linear earthworks, which consisted of defensive banks and ditches, stretching across the landscape.

During the Early Christian era there was a huge increase in grasses and weeds associated with pasture and arable farming. Agricultural improvements with the introduction of the horizontal mill and plough allowed for extensive land tillage. Such improvements in turn led to increased populations and settlements.

During the Medieval period the construction of defensive earthworks (*mottes*) across the landscape was widespread. The Norman farmers needed water-filled moats and earthen banks topped by a palisade to protect their crops. Tower houses were more widespread than the earlier Norman fortifications, especially in the Ormond lands of Kilkenny. Plantation settlers cut passes through the remaining wooded areas to enable bridge building, which left a permanent impression on the landscape. As arable farming increased, the landscape reflected the commercial importance of farming with new field pattern systems. Such landscape origins are evident today on the landscapes of County Kilkenny.

#### 1.4.2.- Man made Landscapes

By the Early Christian Era, impacts of human settlements on the landscape were evident. Ringforts enclosing single farmsteads and irregular crop fields were predominant man-made landscape features. Sloped sites within lowland areas were chosen for their better access to soils and open visibility.

Many of the Ecclesiastical settlements of this era developed into large Monasteries (i.e. Kells / Jerpoint Abbey) and some became proto-urban centres involved in specialist industries. Many of the high crosses and round towers dotted around the County are also characteristic of man made structures of this era.

During the Plantation period, planned towns were established. Plans prescribed a settlement pattern based on town and landlord villages. The proto-urban areas developed, many into the existing large urban centres of Ireland. Within County Kilkenny the main urban areas include those of Kilkenny City, Graiguenmanagh, Thomastown, Callan and Castlecomer (see Map 1). Land parcels within the County are dense and regular in almost all areas, except the upper slopes of Brandon Hill and the north Slieveardagh Uplands – as illustrated in Map 1.

#### 1.4.3.- Historical and Cultural Landscapes

Historical settlement of the County has induced landscape changes through the clearance of vegetation, the enlargement of settlements and the establishment of communication routes as detailed in Section 1.4.1.

The sites and monuments distribution (Map 2) shows the spread of historic settlement. This historic pattern of settlement influenced the cultural landscape features of the County. An increasing population, a flourishing rural economy and the establishment of settlement clusters all marked the evolution of this cultural landscape. During the Christian era, large monasteries and village clusters were established with resultant woodland clearance. Successive invasions also modified the landscape – the Vikings strengthened urban areas and their commercial function, whilst Norman invaders modified and strengthened villages and towns. The plantation towns and estate systems (estate housing and land is most notable throughout the county) also physically and culturally affected the landscape. Even today, field patterns are evident throughout the County, which reflect large estate land holdings.

## 1.4.4.- The Landscape Today

An inland County of 796 sq. miles (509,432 acres), Kilkenny consists of a fertile central plain with uplands to the north-east, north-west and south. The County has been settled for the past 5,000 years and approximately 6% of its landmass is wooded. The river valley network is an important landscape feature within the County. The River Nore halves the County on a north/south axis, with the River Barrow at the eastern County boundary and the River Suir at the southern County boundary. Their estuaries are located at the south-east of the County (at the county boundary with Waterford and Wexford), providing the most spectacular of the County's landscape areas.

The topography of the County consists of a vastly fertile central plain with uplands in the northeast, the north-west and the south. There are no remarkable topographical changes in the County although there are significant topographical features such as the Castlecomer Plateau to the north-east and Brandon Hill to the south-east. Generally the topography is gently undulating at higher elevations. Sandstones and shales of the Upper Carboniferous period with coal seams are predominately found in the north of the County. Limestone deposits are located in the north-west and centre of the County, with sandstones and conglomerates to the south. Granite is to be found from Graiguenamanagh westwards towards Mullinavat. Fertile soils from Goresbridge to Callan (central plain) have marked this area as the 'golden vein' of the County.

In general terms, the topographical features (i.e. Castlecomer Plateau, Brandon Hill, Slieveardagh Hills and the south-east uplands) together with the estuary to the south-east where the 3 rivers (i.e. Nore, Barrow and Suir) of the County meet, provide high amenity areas due to their landscape characteristics and distinctiveness and the visual amenity value.

# **1.5.-** Landscape in Planning

Landscape and scenery are often important considerations in making planning decisions. It is important, therefore, to provide clear, fair and easily anticipated landscape policies to guide applications and decisions. In this way disappointments can be anticipated and avoided while also ensuring that decisions are more easily understood and accepted. The purpose of this document is to identify and describe the landscape character of each part of the County, its capacity to accept change (or to absorb development without disproportionate effects) and to produce a series of polices to guide development in each type of landscape.

# 1.5.1.- Development Planning

There have recently been significant developments in the field of landuse planning, settlement policy and the regulations governing the planning system in Ireland. These changes arose with an acceptance of the principles of sustainable development and Local Agenda 21. Such changes ensure that a balance between development and the protection of the environment is achieved. The Development Plan is a tool used by the Local Authority to ensure that an integrated approach to growth, development issues and the landscape can be achieved in tandem.

Draft Guidelines for Planning Authorities have been published by the Department of the  $Environment^4$  which consider the functions of development planning and the landscape. The guidelines state that:

'Each plan should contain a general statement to the effect that landscape considerations will be an important factor in all land use policy for the area'. (Pg. 18)

Therefore, each local authority must integrate landscape planning into the development plan, through a landscape appraisal study.

Within the plan natural and scientific elements of the landscape are identified together with the areas of visual importance and high amenity value. Objectives and policies formulated are applicable to the landscapes of the County. This landscape appraisal study has examined the landscape character areas of the County and their sensitivity, which have been considered during the evaluation and policy formulation phases of this study, for inclusion in the County Development Plan.

Document 3 – Landscape Policies, describes policies in relation to each landscape area and appropriate objectives. The policies range from conservation and enhancement to proactive encouragement of certain developments or activities.

## **1.5.2.- Development** Control

Development Control is a statutory process of controlling development by ensuring that permissions granted are consistent with the policies and objectives set out in the County Development Plan (i.e. of a high design, layout and functional standard).

The present guidelines<sup>5</sup> state that:

'In those decisions where landscape considerations are relevant ... regard should be had to the policy and objectives of the Development Plan for the particular landscape character, values and sensitivity in question.' (Pg. 19).

<sup>&</sup>lt;sup>4</sup> 'Landscape and Landscape Assessment', Department of the Environment, June 2000.

<sup>&</sup>lt;sup>5</sup> Ibid.

Development Control focuses on the conservation and protection of the elements of the existing built and natural environment in a sustainable manner. In relation to landscape planning, development control should focus on:

- rural settlements and their place in the landscape;
- curtailing ribbon/piecemeal development in the interest of sustainability and environmental protection;
- building design and the landscape;

Development control is noted as effective in encouraging the use of local and natural materials in rural development, the reinstatement of areas, previously used for extractive industries and the development of rural infrastructure. It is also an effective tool in curtailing the use of suburban development in a rural area, the use of non-native planting and use of visually obtrusive colours to a rural area.

This study focuses on the distinct character units as preliminary identified and illustrated in Figures 1, 2 & 3 – Schematic West-East Transect of Kilkenny Landscape. The final assessment identifies 14 landscape character areas (See Section 3 and Map 13). Landscape policies as presented in Document Three, integrate the policies of the County Development Plan with Development Control measures to produce guidelines, which focus on landscape values, character and sensitivity.

# 2.- Evaluation

# **2.1.-** Landscape Factors

Landscape factors comprise physical, human and aesthetic environmental aspects that combine, among others, geology, landform (e.g. topography and slopes), landcover (e.g. vegetation and land use) and landscape history (e.g. archaeology and settlement patterns). These factors help in identifying boundaries of Landscape Character Areas (see Section 3) and define the characteristics of a landscape while providing distinctiveness to such identified areas.

The following sections describe generally the landscape factors of County Kilkenny:-

# 2.1.1.- Geology and Soils

The basic rock formation of County Kilkenny consists almost completely of limestone. However, the geology of the County can be classified as quite complex as sedimentary rocks (e.g. sandstones, slate, and conglomerates) of various types and ages (glacial and recent sediments) are commonly found mantling the limestone (see Map 3).

The small-scale relief is provided by eskers, drumlins, raised bogs and river flood plains, which leave the area resembling a plain of glacial deposition. Isolated hills that rise up to 60m above the surrounding lowlands consist of Carboniferous limestones peeping through the Upper Carboniferous glacial deposits. Sandstones and shales provide the higher topographic features, such as the Castlecomer Plateau.

The subsoils map of the County – Map 4 - shows that there are large areas of rock within a metre of surface or more, spread throughout the County, particularly to the south. Stratified gravels derived from various limestone, sandstone and shale types and ages (e.g. Lower Paleozoic and Carboniferous) as well as alluvium are largely found along the valleys of the Rivers Nore, Barrow and Suir. Diamictons derived from limestone, gravel and diverse sedimentary rocks, form a layer over the solid geology of the County. Diamictons derived from Lower Carboniferous Limestone cover the central lowland areas to the east and west of Kilkenny City. Diamictons derived from Namurian Sandstone and Shale mantle the Castlecomer Plateau and the North-east Kilkenny Uplands, whilst Diamictons derived from Devonian Sandstone and Granite are commonly found on the south-west and south-east uplands as well as on the south Kilkenny lowlands.

Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action. The parent material of soils in County Kilkenny consists of a mantle of glacial drift with a considerable variation in geological composition, physical constitution and thickness. The variation in geological composition is due mainly to the influence of the coal-bearing hills to the north of the County.

Soils in County Kilkenny are generally classified as fertile, due to the existing rivers and streams that run through the County providing fluvial soils and consequently, lush, rich, and fertile valleys with prosperous pasture and farming lands. Soils survey investigations show that the large portion of the County possesses a very high proportion of deep fertile soils, i.e. Podzols, and Regosols (see Map 5).

Grey Brown Podzolic soils are dominant with medium-heavy texture and great depth of profile. They derive from calcareous glacial drift deposits and provide some of the best soils in Ireland. Furthermore they are the most important soils in the region and occur extensively over the County. They are deep, well drained soils derived from calcareous drift composed mainly of limestone with some coal shales and sandstone. These soils are fertile and all-purpose soils, excellent for grassland and also for the production of a wide range of vegetable crops.

To the north and north-west of the region, heavy textured wet soils are predominant (resulting from shales, grits and flagstones of glacial drift). Gleys are poorly drained due to a combination of heavy texture (influence of shales and grits), gently undulating topography and/or high ground-water level. The land use range of these soils is limited and they are best suited for grassland production.

Lighter, shallower soils are found on the shores of the Rivers Nore, Barrow and Suir, derived from alluvial deposits, i.e. coarse textured gravels and sands. These soils are known as Regosols and are free-draining soils subject to flooding. They are best suited for grass production but also support good crops of cereals.

The groundwater vulnerability of County Kilkenny is generally high to extreme. The groundwater protection - Map 6 – (derived from the geology, soils and aquifers of the County) illustrates that the groundwater vulnerability is extremely high in those areas where the rock is near the surface. Certain central lowland areas as well as the lowland areas to the south present a low to medium vulnerability.

In summary, topography is an important factor accounting for geology, subsoils and soil differences within the County. Poorly drained gleys occur on lower grounds and on rolling topography to the west (where the parent material is rather dense and impermeable), while the freely-drained, fertile soils are found on more favourable slopes and the central lowlands. Alluvial soils occur in the flat areas adjacent to streams and rivers.

## 2.1.2.- Topography, Slope and Ridges

Kilkenny is an inland county with an area of 796 square miles with direct access to the sea via Belview Port on the Suir Estuary and via New Ross on the Barrow River.

The topography of the County consists of a highly fertile central plain with uplands in the northeast, the north-west and the south. There are no dramatic topographical changes in the County and generally the topography is gently undulating at higher elevations. The Castlecomer Plateau to the north-east (with a maximum elevation of 300m above sea level) and Brandon Hill (515m a.s.l.) to the south-east present the highest topographical feature (see Map 7).

The generally smooth terrain of the central plain (with an average elevation of 50 to 80m a.s.l.) allows vistas over long distances.

The topography steeply rises at Castlecomer Plateau to the north-east of the County. Similar topographical features are present to the south-east (Brandon and Croghan Hills), to the north-west (Slieveardagh Hills) and to the south-west (including Kilmacoliver, Carriganog and Carricktriss Hills). These topographical features are characterised by:-

#### • Ridge Lines

*Primary ridgelines* (i.e. linear features that define mountain/hill tops) are those which, when viewed from most directions or distances, appear directly against the sky. *Secondary ridgelines* are often associated with spurs, and when viewed from certain directions or distances would have a backdrop of a primary ridgeline above, forming the skyline.

Ridge lines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Due to the relatively flat

nature of County Kilkenny ridgelines are not of a significant order, although they define the skylines at the County boundary (see Map 7).

## • Slope and Altitude

The slope line used in this project indicates the transition point at which the gradient of the land is 10%. This gradient has been chosen as previous survey work showed it to be the slope below which, existing houses had generally been constructed (possibly due to the greater earthwork and engineering requirements required for structures on steeper slopes). The illustrations of Map 7 show areas where the slope is higher than 10%, i.e. 1m increase in elevation every 10m; and areas of altitude above 200m.

Altitude represents another significant landscape factor, as high elevations will be visible over long distances particularly in a lowland dominated county like Kilkenny. Slope and altitude (see Map 7) have a major bearing on visual impacts of development in the landscape and will, therefore, be a major consideration at the policy response stage.

#### 2.1.3.- Drainage

Generally, the County lands are well drained as a result of the existing river network. The River Nore divides the County on a north/south axis, bringing together most of the surface waters (i.e. rivers and streams) from the upland areas to the east and west. The Rivers Barrow and Suir are natural boundaries to the east and south of the county respectively and their tidal estuaries converge at the extreme south-east of the County.

Furthermore, soils in County Kilkenny are generally deep, fertile and well drained. Free-draining soils subject to flooding are commonly found on the shores of the Rivers Nore, Barrow and Suir. The only exception is to the north and north-west of the County, where soils are poorly drained due to a combination of the soil type (gleys), gently undulating topography and high ground-water level.

Due to the nature of the existing soils and low-lying geology, the river valleys and large lowland areas are classified as highly vulnerable under the groundwater protection scheme (see Map 6).

## 2.1.4.- Vegetation and Land cover

County Kilkenny is characterised by low vegetation (e.g. grassland and moorland type grasses) and low, well trimmed hedgerows, which are commonly interrelated to soil attributes. This type of vegetation is generally uniform in appearance, failing to break up vistas, and allowing long distance visibility, and therefore presents an inability to absorb new development.

Well-trimmed low hedgerows around large fields (pasture and tillage lands mostly) are a characteristic of the Kilkenny landscapes. However, trees are found in overgrown hedgerows around small fields in some areas of the County. These hedgerows partially interrupt long-distance visibility, providing some screening and therefore, absorption capacity.

Large conifer plantations occur on hilltops and foothills. Due to the evergreen character of conifer trees, unvaried height and to the adopted plantation locations, conifer forests screen the visibility over wide areas and present a significant feature on certain areas of the County. They generally offer an abrupt edge effect on the skyline intruding on the general outline of the land.

Moorland type grasses are common on the gently sloping topography of the upland areas, in particular at Brandon and Saddle Hills. They provide a barren character to the upland areas and allow open vistas to the surrounding lowlands (see Map 8).

# 2.1.5.- Land use

Lands in County Kilkenny are generally very fertile and of high quality, in particular on the lowland plain around Kilkenny City. This is due to the existing appropriate soil and drainage conditions. Upland areas such as the Castlecomer region develop into poor to average quality land, due to their topography.

The main land use in the County is grassland, which provide for dairy farms at several areas throughout the region. There is a significant level of tillage farming in general, more concentrated around Kilkenny City and on the fertile central plain of the River Nore. Patches of wheat and crop fields intertwine with well-defined grass and pasturelands forming a mosaic pattern on the lowland areas (see Map 9).

Ouarrying is a significant land use to the north-east of the County, particularly around Castlecomer Plateau as a result of the existing natural resources in the area.

State and privately own conifer forests are widespread all through the County, although most of these plantations are located in uplands areas. Approximately 6% of the County lands are wooded, most of it by conifer plantations. Small areas of deciduous trees can be found along the river valleys. A number of deciduous woodlands throughout the County are designated as proposed Natural Heritage Areas or Special Areas of Conservation.

# 2.1.6.- Settlement, Population and Infrastructure

# • Settlement and Population

Published census results show that the population of County Kilkenny has increased by 6.7% (5,085 persons) during the inter-census years of 1996 - 2002 (see Table 1). Detailed census results for the County are unavailable at the time of compilation of this document, however the analysis of the 1996 census figures indicates the existing settlement pattern throughout the County.

	1996	2002	% Change
Population	75,336	80,421	6.7
Table 1	Census Results fo	or County K	ilkenny

Census Results for County Kilkenny Table I

In 1996, 45.4% of the County population were classified as living within towns. Kilkenny City & its environs contained 18,696 persons (54.6 % of the urban population). The four larger towns of the County (Callan, Castlecomer, Graiguenamanagh and Thomastown) and those towns on the County boundary with Waterford (New Ross and Waterford City) contain the remaining 45.4% of the County's urban population. All towns outside the City boundary contain populations of less than 2,000 persons.

Preliminary results from the 2002<sup>6</sup> census indicate that the total population of County Kilkenny in 2002 amounted to 80,421 persons. While the total population increased almost 7% in the period 1996-2002, parts of the County experienced population decline. Growth was predominantly concentrated in eastern and south-eastern areas, and in the proximity to the main towns, particularly Kilkenny, Callan and Thomastown.

<sup>&</sup>lt;sup>6</sup> Census 2002, Central Statistics Office, Preliminary Report

Kilkenny is a predominantly rural county with a strong pattern of independent towns and villages connected by the national and regional roads networks. There are a considerable number of smaller villages and settlement clusters with low population densities.

In 2002, approximately 88% of the population lived in rural areas and the population increased more significantly in rural areas than in urban centres. The Census defines a rural aggregate area as an area outside clusters of 1,500 or more inhabitants. These areas continue to experience development pressure. The share of population accounted for by urban centres remained stable, while that of the environs of the towns of Kilkenny, Callan, Thomastown and Castlecomer continued to rise.

This data indicates that there is a dispersed population pattern and therefore, a weak settlement structure within the County, linked to the fact that a large proportion of the County Population reside in rural areas (see Map 10).

#### • Infrastructure

The County has a good road network, which is critical for the local and regional economy. Five National Primary Routes (N10, N9, N25, N8 and N24) and three National Secondary Routes (N76, N77 and N78) provide access to the County. Eighteen Regional Routes (R426, R430, R431, R432, R435, R690, R691, R693, R697, R698, R699, R700, R701, R702, R703, R704 and R705) and many minor roads also traverse the County (see Map 8).

The railway network also links the county to the region. Current rail services link to Dublin and Waterford:

- Waterford-Kilkenny-Kildare-Dublin
- Rosslare Harbour-Waterford-Limerick Junction Line

The ESB electricity coverage of County Kilkenny is provided by means of 220Kv and 110Kv powerlines, the 220Kv line running across the County from north to south.

## 2.1.7.- Administrative Boundaries

The administrative boundaries within the County are linked to the District Electoral Divisions (DED's) applicable to the Kilkenny area. At present there are some seven rural districts (Callan, Carrick-on-Suir, Castlecomer, Ida, Kilkenny, Thomastown, and Urlingford) and 96 DED's within the County. These classifications do not include Kilkenny Municipal Borough, which has two urban DED's (see Map 11).

#### 2.1.8.- Placenames

Placenames within the County are often derivatives of their surrounding landscapes. These reflect the importance attributed to the surrounding landscape and the more dominant landscape features of an area. Placenames may be of a Gaelic, Norse and Plantation influence. It is a policy of the County Council to retain where possible the distinctive landscape characteristics within placenames. Examples of such place names include:

Word	Landscape Feature	Placename
Cill	Church	Kilkenny (Church of St. Canice)
Jerpoint	Bridge (Jeremiah's)	Jerpoint Abbey
Graig	Village	Graiguenamanagh
Cnoc	Hill	Knocktopher
Baile	Town	Ballyragget
Dún	Fort/Palace	Dunmore
Gort	Tilled Field	Gorteen
Inis	Island/Water Meadow	Inistioge
Muileann	Mill	Mullinavat
Sliabh	Mountain	Slieveroe
Rua	Red	Slieveroe

Table 2 Historic placenames of Co. Kilkenny

# 2.1.9.- Historic and Cultural Landscapes

The cultural landscape of County Kilkenny has emerged from its history of geology and relief, glaciations, soils and river valleys.

# • Geology and Relief

Caledonian geology to the east, and hill and vale areas to the west of the County characterise the geology and relief of the landscape. Caledonian folding has moulded the landscape of County Kilkenny, this being a characteristic of the South Leinster Mountains. Relief is characterised by the resistance of rock types found within the county, generally attributed to resistance of rock types to weathering and erosion. The rock types of County Kilkenny are described in Section 2.1.1 and shown in Map 3.

The physical region in which the County of Kilkenny rests is within the Southern Hill and Vale Area of the Central Lowlands<sup>7</sup>. This landscape falls westward and southward and is interrupted by a number of detached hills and mountains. In this area, relief is broken by the Upper Carboniferous shales, grits and coal, which are younger than limestones. At the Castlecomer Plateau in the north-east of the County and the Slieveardagh Hills in the north-west of the County, the poorly drained soils rise to over 300m and provide stark landscape features with abrupt slopes and sharp transition areas. Between the uplands are the valley areas with good drainage and pasturelands.

The soil types of the County also reflect the cultural changes to the landscapes of the County. The emergence of man-made settlements through the felling of forests, the spread of peat and widespread use of fertilisers have all influenced the landscapes of the County as seen at present.

## Glaciation

The successive ice ages have moulded the landscape of County Kilkenny. At the peak of the last glaciation, Ireland was covered by ice sheets whose movements dramatically changed the landscape. The emergence of the tundra and steppe landscapes are characteristic of this period. Contrasting uplands and lowlands are resultant from the glacial movement, where upland areas have poor soil and lowlands have been deposited with soil forming tills. Glacial erosion transported material to the lowlands (glacial drifts) and soils of County Kilkenny.

<sup>&</sup>lt;sup>7</sup> Aalen, F.H.A., Whelan, K. and Stout, M. (eds.) "Atlas of the Irish Rural Landscape", 1997. (pg. 11)

#### • River Valleys

There are three major rivers flowing throughout the County – The Nore, Barrow and Suir Rivers (the 'three sisters'). These rivers are corridors to the southern coasts and traverse the uplands and lowlands of the County. The river valleys follow a distinct topographical format, which is further examined in Section 2.3.8.

# 2.1.10.- Natural and Scientific Factors

The current County Development Plan lists a number of areas of natural heritage interest, according to their designation as Natural Heritage Areas (NHA's), Special Areas of Conservation (SAC's) or Special Protection Areas (SPAs). Policies for these areas relate to their protection and conservation.

These areas are listed below in Tables 3 - 4 and shown in Map 12.

	atural Heritage Areas e Special Areas of Conservation	
Site Code:	Site Name:	1/2" Map No:
002051	Archersgrove	51
000821	Ardaloo Fen	50
000400	Ballykeefe Woodland	50
000698	Barrow River Estuary	58
000827	Brownstown Wood	58
000830	Clohastia	51
#000831	Cullahill Mountain	44
000401	Dunmore Cave	51[<1ha]
001859	Dunmore Complex	50/51
000832	Esker Pits	51
000402	Fiddown Island	57
001858	Galmoy Fen	44
000403	Garryrickin Nature Reserve	57
000833	Grannyferry	58
000404	Hugginstown Fen	58
002094	Ice House near Inistioge, Co Kilkenny	58 [<1ha]
000836	Inchbeg	50
000837	Inistioge	58
000839	Kilkeasy Bog	58
000405	Kyleadohir Wood Nature Reserve	50
000842	Kylecorragh Wood	58
000406	Lough Cullin	58
001914	Lough Macask	50
#002137	Lower River Suir	57,58
000408	Mothel Church, Coolcullen	51 [<1ha]
000843	Mount Juliet	51
000844	Murphy's of the River	58
000845	Newpark Marsh	51
000409	Rathsnagadan Wood	58
000846	Red Bog, Dungarvan	51
#002162	<b>River Barrow and River Nore</b>	
002076	River Nore/Abbeyleix Wood Complex	44
#000849	Spa Hill and Clomantagh Hill	50

#000407	The Loughans	50
000410	Thomastown	51
000411	Tibberaghny Marshes	57
000855	Whitehall Quarries	51

Table 3pNHA's, cSAC's of County KilkennySource: County Kilkenny Development Plan, 2002, Volume 1.

Proposed Natural Heritage Areas are mainly located in the environs of the Rivers Nore, Barrow and Suir. There are also a number of proposed NHAs dispersed throughout the County.

NHAs are national designations introduced by the Wildlife (Amendment) Act 2000. Although these designations are not yet in force as the relevant legislation has not yet been enacted the County Council policies in regard to these areas relate to their protection and conservation.

Areas of Scientific Interest		
Мар	Ref Name	
S 676 325	Ballylogue Wood	
S 729325	Tintine	
S 71 48	Ullard	
S67 32	Ballyfoile	
S 61 93	Brownsbarn Bridge	
S 54 75	Castlecomer Estate Woodland	
Table 4	County Kilkenny Areas of Scientific Interest	

Table 4County Kilkenny Areas of Scientific InterestSource: County Kilkenny Development Plan, 2002, Volume 1.

Special Areas of Conservation cover the riverbanks of the Nore River, crossing the County with a north-south direction, as well as the western banks of the River Barrow and the eastern banks of the River Suir.

SACs have been created by the Habitats Directive (92/43/EEC) to enable the protection, conservation and, where possible and necessary, the restoration of certain habitats and/or species. Designated SACs are compiled within a framework of protected areas – i.e. *Natura 2000*.

There are neither existing nor proposed Special Protection Areas (SPA) in County Kilkenny.

The County also contains areas of high amenity (see Table 5). Areas of high amenity are those which have outstanding natural beauty and/or a unique interest value. Council policy in relation to such areas demands a high standard of design and sitting for new developments in order to protect these amenities.

Areas of high Amenity in County Kirkenny	
1.	Spa Hill area bounded by roads nos. 45,53,35,65,64 (lands rising east
	from the N8 at Johnstown)
2.	Lands bounded by roads nos 119,137,146,122 & 96
3.	Castlecomer Demesne
4.	Jenkinstown Park
5.	Lands bounded by roads nos 229,259, 182, 241, 235 bounding Co. Carlow
6.	Lands bounded by roads nos 217, 283 & 281
7.	Lands bounded by roads nos 231, 287 & 277
8.	Barrow - Nore river valley area bounded by roads nos. 319, 351, 527, 508,

# Areas of High Amenity in County Kilkenny

	515, 459, 538, 473, 519, 494, 498, Barrow River, roads nos. 694, 628,
	672, 529, 524 & 532
9.	Area at Tipperary border bounded by roads nos. 364, 363, 346, 488 & 489
10.	Area bounded to north by N24 and to the south, south east by the River
	Suir
11.	Lough Cullin area
12.	Barrow / Suir Estuary, between New Ross and Wexford, borded by rivers
	and by road no. 674
13.	Lands to north and south at King's River Valley bounded to south by road
	no 319

Table 5.Areas of High AmenitySource: County Kilkenny Development Plan, 2002, Volume 1.

The Council have also noted that there is a need to protect high amenity views and prospects (as listed in Table 6). These views are protected with policy 9.4.5 of the current County Development Plan, Volume 1.

# Views to be preserved and protected

- A1 View east and south over the Barrow valley on the Thomastown / Graiguenamanagh Road, R703 from Coppenagh Hill between the junctions with road numbers LP4203 and LT 82152.
- A2 View East over the Barrow Valley on the Graiguenamanagh / New Ross Road and in particular the views overlooking St Mullins, between the junctions with road numbers LP 4209 and LT 82463
- A3 View east over the Barrow Valley on the Graiguenamanagh / Ullard Road just North of Graiguenamanagh, Road No. LS 8221 between the junctions with road numbers 438 and LS 8222.
- A4 View to the south east over Mount Brandon on the Inistioge / Graignamanagh Road No LP 4209 between the junctions with road numbers LS 8241 and R705.
- A5 View to the south west over Inistioge and the Nore Valley on the Inistiogue / Graiguenamanagh Road No LP 4210 between the junctions with road numbers LS 8238 and R700.
- A6 View south west over the Nore Valley between Inistioge and the junction between the R700 and LS 8289.
- A7 Views west over the Nore Valley on the Thomastown / Inistiogue Road R700, between Inistioge and the junction with road number 463, particularly those at Brownsbarn Bridge and Dangan.
- A8 View East over the Nore Valley on the Thomastown/Inistioge ôGrenanö Road No LP4208 S. of Thomastown between the junctions with road numbers LS 8236 and 529.
- A9 View to the South East over the Barrow Valley on the New Ross Waterford Road N.25 between the junctions with road numbers LS 7513and 692.
- A10 View North West over the valleys and the confluence of the Nore and KingÆs Rivers on the Stoneyford. Bennetts Bridge Road No. LP 4202 between the junctions with road nos 7LT 42022 and 490.
- A11 View East into the Barrow Valley and lowland plains on the Castlecomer / Paulstown Road No.LP 2625 and from road nos. LT 66751 and LS 6671 between the junction at road nos. LP 2625 and LS 6671 and the junction at road nos 248 and 209.
- A12 Views overlooking Castlecomer and Ballyragget on the Castlecomer / Ballyragget Road R694 between its junctions with road nos. 1227 and 250m S.E.of road no 1063.
- A13 Views west over Kilkenny City and East over Carlow on Ballysallagh/Kanesbridge Road No. LP 1815 between the junctions with road nos. LT 66542 and LS 5886.

A14	Views north and east on the Johnstown Gathabaun Road No. LP 1805 between junctions with Road nos. 1204 and LT 18054.
A15	Views west into Co. Tipperary from the Callan/Clonmel Road N.76
A16	View East towards Kilkenny City on the Kilkenny / Kilmanagh Road No. LP 1011
	between the junction with road nos. LT10111 and LT110112A17 View south over the
	Suir valley on Templeorum / Barrabehy Road No.LP 1040
A18	View west into Co. Tipperary on Kilmacoliver / Scough Road No. LS5097.
A19	View west towards the Slieve Bloom Mountains on road nos 96 and 110 at the junctions
	with road nos. LS5839 and LS 5846 (Ballymartin Cross Roads).
A20	Views south and north over King's River Valley between Kells and the Waterford Road.
A21	Views south west over the Rivers Suir at Grannagh Castle to the Comeraghs
A22	Views over the confluence of the Rivers Suir and Barrow at Snow Hill on road
	nos.LS7483 from its junction with road no.LP 3414 and view from road no. LT 74831-7
	between road no LS7483 and 8LT 74831-9

Table 6.Protected ViewsSource: County Kilkenny Development Plan, 2002, Volume 1.

Two landscape areas of significant importance identified in the County Development Plan are Woodstock Gardens and the Mount Juliet Estate. Policies have been formulated in order to protect and enhance these features. A Garden Restoration Project is currently ongoing at Woodstock and an Action Plan for Mount Juliet has been compiled.

# 2.1.11.- Climatic Factors

Climate is quite uniform throughout the County. The continental climate type of the County is rather mild and moist with an average annual rainfall of 800-1000mm. Mean daily temperatures range from  $5.2^{\circ}$ C to  $13.4^{\circ}$ C<sup>8</sup>, however it is known that temperatures vary rather extremely throughout the year (the highest temperature ever recorded in Ireland was in June 1887 at Kilkenny Castle when the thermometer shot up to  $33.3^{\circ}$ C)

Nevertheless, the climate is generally fairly stable as it is the area of the country least affected by the sea. However, Kilkenny experiences an average of 4 days per year with snow lying, 9 days per year with hail, and 5 days per year with thunderstorms.

<sup>&</sup>lt;sup>8</sup> 30 year average from The Irish Meteorological Service

# 2.2.- Landscape Character

# 2.2.1.- Introduction

The landscape is generally characterised by physical factors such as landform and landcover – topography, water, vegetation, settlements, etc.- which result from geological and geomorphological history, and by intrinsic values such as historical, cultural or religious.

Thus, the landscape character areas refer to units of similar landscape characteristics and features with distinctive and uniform landscape quality and integrity.

# 2.2.2.- Methodology Landscape Types

The methodology approach used in this study comprises 3 major phases, described as follows:-

# • Phase 1 Identifying Physical Units

This is an initial desktop phase, which involves the collation of the following map data for the County;

- Topography (Contours, Slopes & Ridge Lines)
- Soils and Subsoils
- Geology
- CORINE Land Cover
- Forestry & Field Boundaries
- Settlement Patterns

Topography provides valuable information for landscape assessment. Topography is of particular importance in Co. Kilkenny due to the generally flat nature of the County's landform. Primary and secondary ridgelines and slope are identified from 10m contour topographic maps. These also prove to be helpful in identifying landscape character areas.

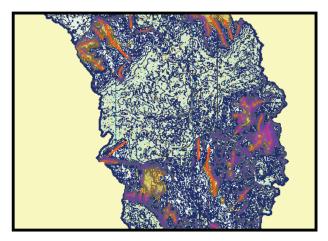


Figure 5. Topography of Co. Kilkenny

The slope line to be used in this project indicates the transition point at which the gradient of the land is 10% (see Section 2.1.2.). Slope has a major bearing on visual impacts of development in the landscape and will, therefore, be a major consideration at the policy response stage. An example of the slope and ridgeline and slope mapping technique is indicated in Fig. 6 below.

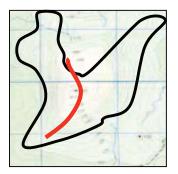


Figure 6. Slope and Ridge Line Mapping Technique

Although geology and soils' visual representation at ground level is often not obvious, they represent a significant factor in landscape evaluation. Using this data helps to confirm boundaries already identified by visual analysis and other map data.

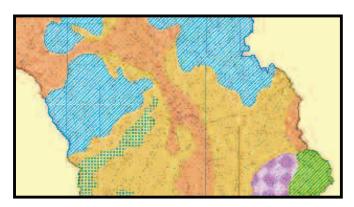


Figure 7. Soils of Co. Kilkenny

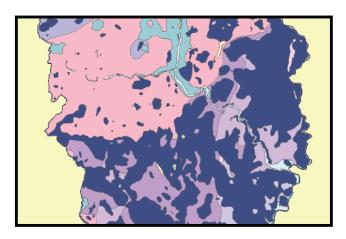


Figure 8. Subsoils of Co. Kilkenny

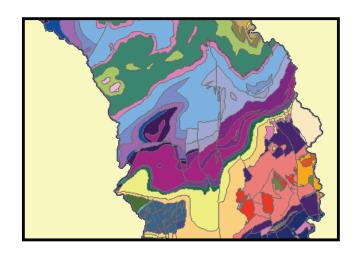


Figure 9. Geology of Co. Kilkenny

The CORINE Land Cover map shows the surface covering of the County using a European standard methodology, dividing land cover into 19 subcategories under the following categories;

- Artificial Surfaces
- Agricultural Areas
- Forest and Semi-Natural Areas
- Wetlands
- Water Bodies

The land cover identified in the CORINE Project provides valuable information on the land uses which helps identify visual units or zones of landuse uniformity on the landscape. It also provides information with regards to the sensitivity of landscapes (see Section 4).

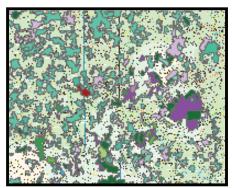


Figure 10. CORINE Land Cover Map

Forestry and field boundaries provided by Kilkenny Council help to further define existing landuse patterns in the County.

All of the maps will be overlaid to examine repeated occurrences of transitional boundaries between physical characteristics. The final output of the first part of this phase is a physical map.

# • Phase Two Identifying Visual Units

In this phase the County is surveyed in order to establish homogenous visual units, the boundaries for which, may be the result of either the extent of visual fields, the transition from one landscape type to another, or the image unit associated with a particularly dominant feature, which acts as a focal point.

The general methodology consist in applying boundaries to areas that are particularly visually enclosed by a series of primary ridgelines for example. In the case where a landscape feature act as a dominant focal point the precise boundary is not obvious and would require map data for final determination.

The visual units will provide the basis for the final *Landscape Character Units* with the physical map data providing confirmation of the precise or transitional boundaries. In some instances, where several elements indicate a transitional boundary, a dotted line of conservative best fit is used with a bias toward the more visually obvious elements. This conservative best fit is usually supported by visual characteristics of the area perceived during fieldwork visits. An example is illustrated below.

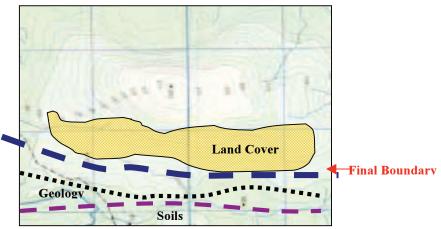


Figure 10. Defining Landscape Character Units

# Phase Three Identifying Landscape Values

In addition to the physical and visual characteristics of the landscape, communities or individuals attach certain values to the landscape. Landscape values can be described as the environmental or cultural benefits (including services and functions) derived from various landscape attributes. In some cases, the character of a given landscape makes it representative of its kind, providing identity based on uniqueness or rarity.

The more frequent values attributed to a landscape are as follows:

- Aesthetic
- Ecological
- Historical (Archaeological)
- Socio-cultural
- Religious
- Mythological

The values are weighted by consultation with nominated agencies throughout the County (i.e. workshop – see Document 2), and combined desk and fieldwork studies.

#### 2.2.3.- Principal Identification

The landscapes in County Kilkenny are varied, ranging from complex agricultural patterns in the low lands to upland ridges with limited vegetation and diverse/vegetation-rich river valleys.

Desk studies and site investigations have revealed the main *Landscape Character Units* of the County. Character Units are distinguished throughout the landscape where there is visual distinctiveness and identity through a continuation of similar characteristics (such as slope, landuse and vegetation). As the landscape appearance and sensitivity within each Character Unit are similar, the units are very useful for the consistent and clear application of policy, as the effects of development will be relatively consistent within each of these areas.

The landscape of the County Kilkenny has been divided into fourteen Character Units as outlined in Section 4 that follows.

# 3. - Principal Landscape Character Areas

Landscape assessment (desk and fieldwork) has identified fourteen *Landscape Character Units* or *Areas* within County Kilkenny (see Section 4). This section gives a brief description of the main *Landscape Zones* identified at preliminary stages. It should be consulted together with the schematic landscape representations (Figures 1, 2 & 3) and the landscape sensitivity matrix at the end of this section (Figure 4). For landscape vulnerability clarification refer to Section 5.

## 3.1.- Lowland

The Lowland Character Unit contains predominately fertile lands with high levels of population and intensive land management (agriculture). There is a high range of use-potential in such areas. The slope and topography of such units is in a shallow/gradual transition. Concentrations of tillage lands in this lowland area tend to be characterised by extensive views across large fields with low and highly maintained hedges. This character unit may be classified **robust** to **normal** or **sensitive**, depending on specific locations (see Section 5). See Lowland areas in Sections 4.6 to 4.7 for further detail.

## **3.2.-** Steep slopes to upland areas

This character unit contains some of the following elements:

- Low intensity agriculture/stock rearing
- Old coniferous forestry
- Some old estate planting (mixed deciduous)
- Successional vegetation (heath, gorse, scrub woodland)

It must also be recognised that some unit areas have concentrations of sandpits and quarries. This character unit may be classified **sensitive** to **normal.** See Transition areas in Sections 4.11 to 4.14 for further detail.

# 3.3- Upland Ridges, Peaks and Prominence

Characterised by poor drainage and high wind/rainfall, this landscape unit has a limited range of vegetation and land use. The lack of trees is very conspicuous on account of the elevation. This character unit may be classified **sensitive** to **vulnerable.** See Upland areas in Sections 4.1 to 4.5 for further detail.

## **3.4.-** Upland Enclosures

This character unit contains many of the distinctive features of 3.3 above, but without visual exposure. This character unit has 'internal' visual vulnerability and 'external' visual robustness (due to low levels of receptors and to high degree of enclosures). This landscape character unit may generally be classified **sensitive**, **normal** or even **robust** at certain locations (see Section 5). See Upland areas in Sections 4.1 to 4.5 for further detail.

## 3.5.- Upland Plateau

This character unit may be described as in 3.3 and 3.4 above, with very mixed robustness/vulnerability depending on configuration/topography. This character unit may be described **sensitive** to **normal.** See Upland areas in Sections 4.1 to 4.5 for further detail.

## **3.6.-** Foothills/Lower Slopes (Transitional Areas)

This character unit contains large fields with low hedges and scattered smaller trees. The land is mostly used for stock rearing or some mixed tillage. Blocks of coniferous forestry (both old and new); some new deciduous forestry and some successional woodland on steep slopes are within this character unit type. The unit also has a high water table and stream banks. This character

unit may be mostly classified **normal** to **robust**, although **sensitive** at specific locations (see Section 5). See Transition areas in Sections 4.11 to 4.14 for further detail.

# **3.7.-** Transition Lowlands

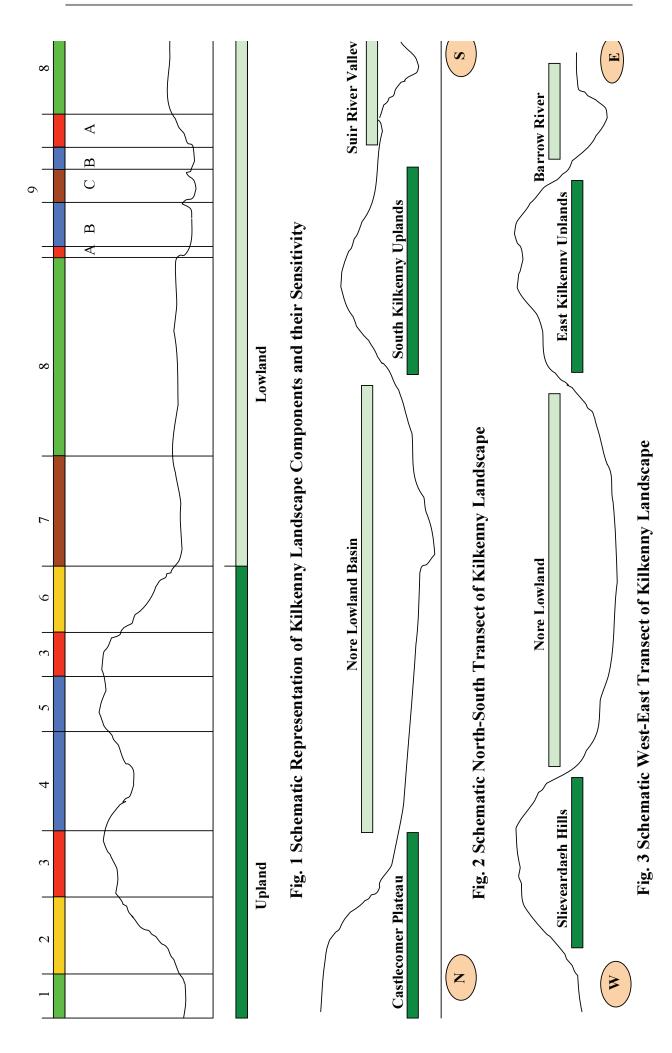
This character unit accommodates areas with poor drainage, poor fertility and/or limited landuse potential that sustain small enclosures, vigorous hedges, wood, many hedgerow trees and low levels of land management. This character unit may be classified generally **normal** to **robust**. See Transition areas in Sections 4.11 to 4.14 for further detail.

## 3.8.- River Valleys

River valley character units have 3 general components:-

- 1 Floodplain slopes. Such slopes are often steep and wooded. This character unit may be classified vulnerable to sensitive.
- 2 Floodplains levels. Such units tend to have mixed uses. This character unit may usually be classified normal to sensitive.
- **3 Riverbanks.** This unit is often wooded and may be classified as **vulnerable**.

See River Valley areas in Sections 4.8 to 4.10 for further detail.



Name	Sensitive	Sensitive-Normal	Normal	Robust-Normal	Robust
1 Extesive Lowlands					
2 Steep Transition Slopes					
<b>3Upland Ridges/Peaks</b>					
4Upland Enclosures					
5 Upland Plateaux					
6 <b>Foothills/Midslopes</b>					
7Lowland Transitions					
8 Agricultural Lowlands					
9 <b>River Corridors</b>					
9a <mark>Floodplain Slopes</mark>					
9b <b>Floodplains</b>					
9cRiverbank					

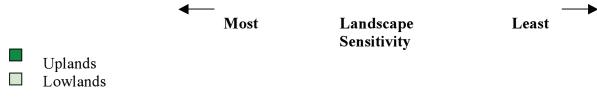


Fig. 4 Landscape Sensitivity Matrix

# 4. - Landscape Character Areas

This section identifies significant character areas within the County and is based on identified preliminary landscape areas, on a detailed map survey and on subsequent desk study and site visits. The section is subdivided into upland areas, lowland areas, river valleys and transitional landscape areas. The upland areas include the mountainous areas of the County, the lowland areas examine the low-lying agricultural lands and the urban area environs of Kilkenny City, the river valleys refer to the environs of the three rivers that run through the County, whilst the transition areas refer to the zone between the upland and lowlands areas.

# **Upland** Areas

# 4.1.- The Slieveardagh Uplands

# 4.1.1.- Description

The Slieveardagh Uplands (Hills) are located in the northwest of County Kilkenny and extend into the neighbouring County of Tipperary. The undulating hills situated within County Kilkenny lie to the west of the Nore Valley and to the north of the Kilkenny basin. These uplands may be sub-divided into the northern Slieveardagh Uplands and the southern Slieveardagh Uplands (see Map 13). Both areas are separated by a transition zone (see Section 4.11). At the south hills, the terrain slopes from the Nore Valley to the highest point of 333m above sea level near the village of Ballybeagh. In the north hills, the terrain rises to 316m above sea level near Killoshulan.

The elevated nature of this physical area, provides a defined skyline with scenic views over southwest Kilkenny and the neighbouring county of Tipperary.

Although this area is generally perceived as having no significant landscape value (refer to Document 2), the northern hills are perceived as having certain ecological and scenic value. The zone is also perceived as having development potential.

# 4.1.2.- Land Uses

The Slieveardagh uplands are rural in context with a number of scenic views and natural features. The general landuse on the uplands is agricultural grazing, however some areas are occupied by conifer and broad leaved forests. Land parcels are of a medium size, with a proliferation of hawthorn and gorse. Vegetation is low lying, owing to the climatic conditions, and the presence of bog rushes indicates a high water table. Hedgerows are generally unmaintained.

A dispersed pattern of residential and traditional farmhouse structures are indicative of a low population density.

# 4.1.3.- Boundary Determinants

The boundaries of this unit are directly derived from the subsoils and topography of the area, which largely coincides with the soils and landform, and is further confirmed by the solid geology and existing land uses.

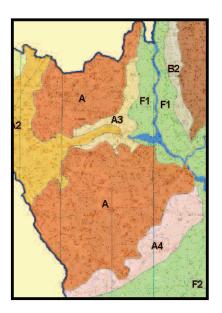


Figure 12.- The Slieveardagh Uplands (Areas A)

# 4.1.4.- Critical Landscape Factors

# • Elevated Vistas

A number of local, third class roads give access to the uplands. Local roads cross the upper and lower slopes of the hills and provide access for established villages within the uplands, e.g. Ballybeagh, Gortnagap and Courtstown. As a result of the elevated road level and the lack of tall vegetation, there are long distance views towards the Kilkenny Lowlands and the Castlecomer Plateau (see Sections 4.6 and 4.2).

# • Slopes

Sloping land often provides an area with its character and offers a potentially increased elevation, intensifying the visual prominence of any feature over greater distances, as in the case of the Slieveardagh Hills. Slope also provides an increased opportunity for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres in this area.

# • Prominent Ridge Lines

These occur as either primary ridgelines (visible only against the sky from any prospect) or secondary ridgelines (visible at least from some prospects below a distant primary ridge line). In this upland environment of the Slieveardagh Hills, nearly all ridgelines are primary when viewed from the lowland areas.

Ridge lines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, the main concern for the natural linear features formed by the ridgelines of the Slieveardagh Hills is to avoid penetration by development that will interrupt and reduce the integrity of such elements.

# • Undulating topography

Gently undulating topography is presented within the upland area of this character unit. The physical shielding of a built form within the lee of hill where it does not break the skyline renders it visually unobtrusive and reflective of landscape scale. Furthermore, the dynamic and complex nature of undulating land encloses vistas and helps to provide a realistic scale and visual containment not available in open lands.

# • Low Vegetation

Low vegetation, represented in this unit by grassland, moorland and generally low hedgerows, is generally uniform in appearance, failing to break up vistas and allowing long distance visibility, and therefore, providing an inability to absorb development.

# • Shelter Vegetation

Shelter vegetation, represented in certain areas of this unit by coniferous plantations and broadleaved woodlands, provides visual screening, enclosing vistas and helping to provide a visual containment not available in open, low-vegetation lands.



Plate 1.- The gently rising slopes of the Slieveardagh Uplands



Plate 2.- Extensive views and low vegetation on the Slieveardagh Uplands

# 4.2.- The Castlecomer Plateau

# 4.2.1.- Description

The Castlecomer Plateau is an extensive upland area with an almost circular shape that lies between the valleys of the Rivers Nore and Barrow, covering most of the north-east of the County. The terrain steeply slopes from the river valleys to the surface of the Plateau, which gently undulates and gives rise to several small ridgelines at an elevation of between 200 and 340m above the sea level.

The elevated nature of this physical unit provides a defined skyline and significant and scenic views over the Kilkenny basin and the Nore and Barrow river valleys.

The area is generally perceived as special in landscape terms, however suitable for certain type of potential developments (refer to Document 2).

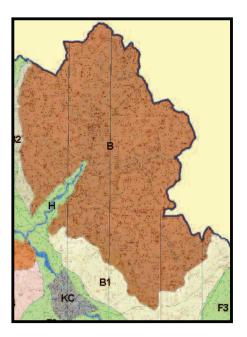
#### 4.2.2.- Land Uses

The Castlecomer Plateau presents a rural landscape with many natural and scenic attractions. The general landuse on the Plateau is pastureland, however, large areas have been planted with coniferous trees. Some patches of bogland and moorland can be found on the upper areas of the Plateau. Land parcels are medium to large sized and hedgerows are generally low and well trimmed.

Occasional farmhouses and dispersed scattered housing can be found throughout the area. Mining for coal extraction was historically a common practice; today clay and limestone continue to be extracted at various quarries, particularly at the eastern slopes of the mountain.

#### **4.2.3- Boundary Determinants**

The boundaries of this unit directly derive from the subsoils and soils, as well as from the landform and topography of the area; this is further confirmed by the solid geology, topography and the existing land uses.



### 4.2.4.- Critical Landscape factors

#### • Elevated Vistas

The N78 skirts the mild, upper slopes and follows the Dinin River valley in an east south-west direction. Similarly, the R426 and the R694 run through the valley and above the upper slopes to the north-west of the Plateau. As a result of the fairly straight and elevated road level, remarkable long-distance vistas of the Kilkenny plain as well as the river valleys of both the Nore and the Barrow are available along these roads.

#### • Steep Slopes

Steeply sloping land provides both a potentially increased elevation and an immediate backdrop for development, intensifying its visual prominence over greater distances. Slope also provides an increased opportunity for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres in this area. Slope often provides an area with its character, and is therefore equally sensitive to development that might impact on that character.

#### • Prominent Ridge Lines

These occur as either primary ridgelines (visible only against the sky from any prospect) or secondary ridgelines (visible at least from some prospects below a distant primary ridge line). In this upland environment, nearly all ridgelines are primary when viewed from the lowland areas.

Ridge lines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, the main concern for the natural linear features formed by the ridgelines of the Castlecomer Plateau is to avoid penetration by development that will interrupt and reduce the integrity of such elements.

#### • Undulating topography

Gently undulating topography is presented within the upland area of this character unit. The physical shielding of a built form within the lee of hill where it does not break the skyline renders it visually unobtrusive and reflective of landscape scale. Furthermore, the dynamic and complex nature of undulating land encloses vistas and helps to provide a realistic scale and visual containment within the Plateau not available in open lands of the lowlands

#### • Low Vegetation

Low vegetation, represented in this unit by grassland, moorland and generally low hedgerows, provide an uniform appearance in the landscape, failing to break up vistas and allowing long distance visibility. Low vegetation fails to provide an ability to absorb development.



Plate 3 Upland character and skyline defined by the ridgeline of the Castlecomer Plateau



Plate 4 Extensive vistas, reinforced by smooth terrain and low vegetation

# 4.3.- Brandon Hill Uplands

# 4.3.1.-Description

This character area is a large upland area to the east of the County, whose principal upland areas include the Brandon and Croghan Hills<sup>9</sup> to the east of the County. The hills are in an almost circular shape around the town of Graiguenamanagh. The terrain in this upland area slopes from the River Barrow valley at the east and the River Nore at the west. The primary and secondary ridgelines of the Croghan Hills vary in elevation from 263 to 365m above sea level, and the Brandon Hill primary ridgeline has an elevation of 515m above sea level.

The elevated nature of this physical unit provides a defined skyline and significant and scenic views over the scenic River Barrow and Nore valleys and the towns of Inistioge and Graiguenamanagh. These uplands also form part of the South Leinster Way walking route. Distant views also include those of the Blackstairs Mountains.

The area is perceived as highly scenic and of significant visual amenity value within the County, and a number of scenic drives are identified (refer to Document 2). Brandon Hill and its environs are perceived as sensitive landscapes, with low and limited development potential, with only tourism development being considered acceptable.

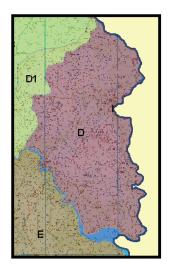
# 4.3.2.-Land Uses

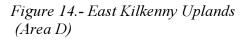
The uplands of east Kilkenny are widely used for recreational pursuits. Brandon Hill has been incorporated into the South Leinster Way walking route and a signposted trail leads to its summit. Although Brandon Hill is largely flanked by moors and heaths, the base of the Hill is extensively covered in forestry plantations, much of this being conifer plantations. Land parcels are small to medium sized, some delineated with low stonewalls. The lower Croghan Hills are in tillage use with maintained low hedgerows

The towns of Inistioge and Graiguenamanagh contain a large proportion of the population residing within this area. Occasional dispersed housing can also be found throughout the area.

# 4.3.3.- Boundary Determinants

This unit's boundaries directly derive from the soils, subsoils topography of the area, which is further confirmed by the soils, the solid geology, landform and existing land uses.





<sup>&</sup>lt;sup>9</sup> The Croghan Hills include the upland areas of Freagh Hill, Croghan Hill, Bishop's Hill, Coppanagh Hill and Saddle Hill

### 4.3.4.- Critical Landscape Factors

#### • Elevated Vistas

The R703 crosses the Croghan Hills from Graiguenamanagh in an east-west direction. As a result of these straight and elevated road level, long-distance vistas of the Barrow and the Nore valleys are available along from the road.

The R705 and R700 run along the lower slopes of Brandon Hill with extensive upland and forestry views.

#### • Steep Slopes

Steeply sloping land provides both a potentially increased elevation and an immediate backdrop for development, intensifying its visual prominence over greater distances. Slope also provides an increased opportunity for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres in this area. Slope provides Brandon Hill area with its character, and is therefore sensitive to development that might impact on that character.

#### • Prominent Ridge Lines

These occur as either primary ridgelines (visible only against the sky from any prospect, which is the case of Brandon Hill) or secondary ridgelines (visible at least from some prospects below a distant primary ridgeline, which generally comprise the hilltops of Croghan Hills).

Ridgelines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, the main concern for the natural linear features formed by the ridgelines of the Brandon Hill Uplands is to avoid penetration by development that will interrupt and reduce the integrity of such elements.

#### • Undulating topography

Gently undulating topography is presented within the Croghan Hills area. The physical shielding of a built structure within the lee of the hills where it does not break the skyline would render it visually unobtrusive. Furthermore, the dynamic and complex nature of undulating land encloses vistas and helps to provide a realistic scale and visual containment not available in open lands.

#### • Low Vegetation

Low vegetation, largely represented in this unit by moorland, grassland and generally low hedgerows fails to break up vistas and allows long distance visibility, and therefore, provides an inability to absorb development.

#### • Shelter Vegetation

Shelter vegetation, represented in certain areas of this unit by coniferous plantations, provides visual screening, enclosing vistas and helping to provide a visual containment not available in open, low-vegetation lands.



Plate 5 View of Brandon Hill – The hilltop low vegetation contrasts with existing tall vegetation on the steeply rising slopes. The skyline in the area is defined by Brandon Hill's ridgeline



Plate 6 Gently rising slopes, low vegetation and extensive vistas on Croghan Hills

# 4.4.- The South Western Uplands

# 4.4.1.- Description

The south-western Kilkenny hills, which comprise the Kilmacoliver and Carricktriss Hills form a low-lying upland area (i.e. upland area with lower elevation to that of Brandon or Slieveardagh Hills). The terrain dramatically rises, steeply sloping from the Kilkenny basin (see Section 4.6) and the south Kilkenny lowlands (see Section 4.7). The area encompasses an undulating landscape of several hills, with primary and secondary ridgelines at an average elevation of approximately 300m above sea level.

The elevated nature of this physical unit provides a defined skyline and significant and scenic views over the surrounding areas of Kilmacow, Mooncoin and Mullinavat.

The area is perceived as having certain landscape value, in particular the western hills of the unit (refer to Document 2).

### 4.4.2.- Land Uses

Killmacoliver Hill is the recorded site of a megalithic grave, marked with an alignment of stones on the hilltop. Large plantation forest estates are visually dominant on the slopes of these hills, the most notable being the Corbally Woods to the southeast of Carricktriss Hill, with forestry on the summit at 285m above sea level. The field sizes are regular in pattern and have low hedgerows. Transitional woodland-scrub areas are also common.

Some significant areas of complex cultivation patterns and natural grassland can also be found within this unit. Small village type settlements have been established, such as Curraghmore, Glencommaun and Mullenbeg.

# 4.4.3.- Boundary Determinants

The boundaries of this unit directly derive from the subsoils and topography, and are further confirmed by the soils, geology and landuses of the area.

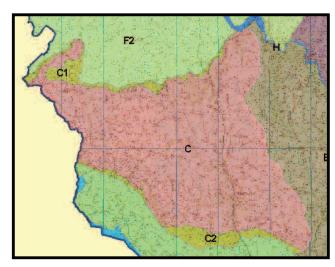


Figure 15.- South Western Uplands (Area C)

### 4.4.4.- Critical Landscape Factors

#### • Elevated Vistas

Long distance views of the River Suir and River Nore valleys are available from the local roads of this upland character area. The R698 crosses the lower slopes of this upland area in a north-south loop towards the village of Owning, resulting in extensive afforested upland views.

### • Steep Slopes

Steeply sloping land provides an area with its character and a potentially increased elevation intensifying its visual prominence over greater distances. Slope also provides an increased opportunity for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres in this area. The steep slopes at the boundaries of this unit provide landscape character to it.

#### • Prominent Ridge Lines

These occur as either primary ridgelines (visible only against the sky from any prospect) or secondary ridgelines (visible at least from some prospects below a distant primary ridge line). Ridge lines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, the main concern for the natural linear features formed by the ridgelines of the South Western Uplands is to avoid penetration by development that will interrupt and reduce the integrity of such elements.

### • Undulating topography

Gently undulating topography is presented within the upland area of this character unit. The physical shielding of a built form within the lee of hill where it does not break the skyline renders it visually unobtrusive and reflective of landscape scale. Furthermore, the dynamic and complex nature of undulating land encloses vistas and helps to provide a realistic scale and visual containment not available in open lands.

#### • Shelter Vegetation

Shelter vegetation, generally represented at certain areas in this unit by coniferous plantations and some deciduous woodland on slopes and hilltops, provides visual screening enclosing vistas and helping to supply a visual containment not available in open, low-vegetated lands. It adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.

#### • Low Vegetation

Low vegetation, represented in this unit by grassland and generally low hedgerows, fails to break up vistas, allowing long distance visibility, and therefore, providing an inability to absorb development.



Plate 7 Gently sloping terrain with low vegetation in the south western uplands

# 4.5.- The South Eastern Hills

### 4.5.1.- Description

This large character area comprises the low lying upland area bordering the River Suir Valley at the southeast of the County. The terrain rises from the Kilkenny basin to the north and the lowlands to the southeast (see Sections 4.6 and 4.7), which gives rise to several small ridgelines at an elevation of approximately 250m above sea level.

Local views include those of the River Suir and into the neighbouring County of Wexford as well as significant and scenic views over the surrounding areas of Mullinavat, Ballyhale, Knocktopher and the River Nore valley as well as Brandon Hill. Distant views include those of the South Leinster Way Mountains. This area is characterised by open undulating lands with regular (medium sized) field patterns, where some rock outcrops occur.

The settlement pattern in this area is of a low density, with most residential development concentrated in local villages such as Glenmore.

Although the area is generally perceived as having no special value in landscape terms, the environs of Glenmore were identified as having special scenic value (refer to Document 2). The unit is perceived as having potential for certain types of developments such as windfarms and forestry.

### 4.5.2.- Land Uses

The main land use in this lowland area is pastureland, with some tillage and agricultural crops as well as both deciduous and coniferous forestry plantations. Many of the field boundaries consist of low, well-maintained hedgerows, intertwined with of Birch and Alder trees. These, combined with copses of the gently undulating landform partially screen low-lying areas.

Settlement patterns outside the defined towns and villages is of a low density, consisting of dispersed rural housing and farm buildings.

# 4.5.3.- Boundary Determinants

The boundaries of this unit directly derive from the subsoils and topography, and are further confirmed by the soils, geology and landuses of the area.



Figure 16.- South Eastern Uplands (Area E)

### 4.5.4.- Critical Landscape Factors

#### • Elevated Vistas

Local roads cross the lower slopes of this upland area, from where extensive lowland vistas and afforested upland views are available. Long distance views of the valleys of the Rivers Nore and Barrow can also be obtained from this upland character area.

### • Slopes

Sloping land provides a potentially increased elevation intensifying visual prominence over greater distances. Slope also provides an increased opportunity for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres in this area. Slope often provides an area with its character, as in this case therefore renders this upland area sensitive to development that might impact on that character.

### • Prominent Ridge Lines

These occur as either primary ridgelines (visible only against the sky from any prospect) or secondary ridgelines (visible at least from some prospects below a distant primary ridge line). Ridge lines perform the important roles of providing an area with its identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, the main concern for the natural linear features formed by the ridgelines of the South Eastern Uplands is to avoid penetration by development that will interrupt and reduce the integrity of such elements.

### • Undulating topography

Gently undulating topography is presented within the upland area of this character unit. The dynamic and complex nature of undulating land encloses vistas and helps to provide a realistic scale and visual containment not available in open lands.

#### • Shelter Vegetation

Shelter vegetation, is represented in some areas of this unit by the presence of trees at certain sections of field hedgerows as well as by some large coniferous and deciduous tree plantations. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms

#### • Low Vegetation

Low vegetation, largely represented in this unit by grassland and generally low hedgerows is generally uniform in appearance. Consequently it fails to break up vistas and allows long distance visibility, therefore providing an inability to absorb development. However, existing hedgerows partially screen lowest land parcels.

#### • Localised River Views

Both the River Nore and the River Suir delimit this character unit. Due to the low-lying but undulating nature of this area, views of the river valleys are available from the high points at some of the local roads. Visual intrusion, which will interrupt and reduce the integrity of the river valley should be avoided along this natural linear feature.



Plate 9 Elevated vistas, smooth terrain and undulating topography with some shelter vegetation



Plate 10 Gently undulating topography

# Lowland Areas

# 4.6.- The Kilkenny Basin

# 4.6.1.- Description

The Kilkenny basin is the most extensive lowland area in the County. For this reason it may be subdivided into 3 subsections as illustrated in Map 13, as follows:

- F1 Kilkenny Northern Basin
- F2 Kilkenny Western Basin
- F3 Kilkenny Eastern Basin

The terrain is generally smooth although undulating in certain areas, with vegetative/wooded slopes rising from the river valley. Sub-area F1 has views of the River Nore Valley and both the Slieveardagh and Castlecomer Hills; Sub-area F2 has extensive views of the Nore Valley and Slievenamon Hills into County Tipperary; Sub-area F3 has extensive views of the Nore Valley and the Blackstair Mountains into County Carlow.

The slopes of the river valleys conform to the general river valley pattern (as laid out in Section 3.8). Natural vegetation (i.e. native trees and shrubs) generally occurs on the floodplain slopes and riverbanks. Grasslands are common on gentle slopes and floodplain levels.

The area is perceived as being normal in landscape terms, with no special scenic or amenity values in general (refer to Document 2). It is also perceived as acceptable for potential future development.

# 4.6.2.- Land Uses

The land uses of the sub-areas outlined above are generally similar. However, in the interest of clarity, each sub-area has been examined separately.

# Kilkenny Northern Basin (F1)

This low-lying area has open mountain views (Castlecomer Plateau and Slieveardagh Hills) with the predominant land uses being pastures (i.e. sheep grazing) and tillage. The land parcels are regular in shape, with scrub hedgerows and intertwined hedgerow trees. Old estate properties are easily distinguished by stonewalls and gateposts, traditional farmhouses and large fields.

# Kilkenny Western Basin (F2)

This sub-area is characterised by predominant tillage and pastureland uses. The basin lies adjacent to the Nore Valley at the east, the Slieveardagh Hills to the north and the south Kilkenny uplands to the south. Both coniferous and deciduous plantations are to be found within this sub-area. Scenic drives are found throughout this area. Low hedging allows for clear open and extensive landscape views, including views of the Knockadrina Hills. The land parcels within this area are regular in form and pattern, and sheep grazing is common.

# Kilkenny Eastern Basin (F3)

The flat topography of this sub-area allows expansive open views (e.g. Brandon Hill and Castlecomer Plateau). The main landuse is dairy farm related with very little tillage. Land uses also include coniferous forestry plantations of Sitka Spruce and Larch. Settlement patterns are scattered, with the majority of the population residing within the local village boundaries.

# 4.6.3.- Boundary Determinants

The boundaries of this unit directly derive from the subsoils, soils and topography, and are further confirmed by the landform, geology and landuses of the area.

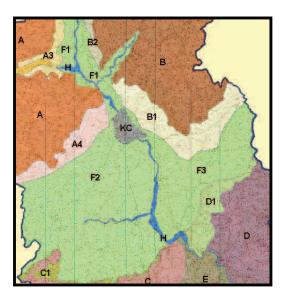


Figure 17.- The Kilkenny Basin (Areas F1, F2 & F3)

# 4.6.4.- Critical Landscape Factors

#### • Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterised this landscape character unit, allows vistas over long distances since the planar surface does not break up fore and middle ground. As a result development can have a disproportionate visual impact in such terrain, due to an inherent inability to be visually absorbed.

#### • Low Vegetation

The grassland, tillage fields and generally low hedgerows of this area provide similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland vegetation and tillage crops are usually uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows partially screen the lowest land parcels. Nevertheless, the common low vegetation proves unable to absorb new development.

#### • Undulating topography

Undulating topography is presented at some limited sections of this character unit, providing a physical shielding and visual enclosure of a built form within the low-lying valleys. In this areas, where development does not break the skyline it renders visually unobtrusive of the overall landscape scale.

#### • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of trees that grow on field hedgerows. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 11 Open landscape views, low vegetation and scattered housing



Plate 12 Smooth terrain and open mountain views from Kilkenny Lowlands

# 4.7.- South Kilkenny Lowlands

# 4.7.1.- Description

This expansive lowland area to the south-west of the County has extensive views of the River Suir valley and the South Kilkenny Uplands, Tory Hill and Carrigatubbrid Hill. Distant views include the Comeragh Mountains. This area has open lands with regular (medium sized) field patterns. Medium sized hedgerows act as field boundaries where few trees can also be found. Rock outcroppings are a feature of this area.

The unit is perceived as being special in landscape terms, particularly around Piltown, Mooncoin and Kilmacow. The area is perceived as being generally suitable for tourism development, and other type of projects can be acceptable in the environs of Waterford City (refer to Document 2).

# 4.7.2.- Land Uses

The land uses in this area are predominately pasture although tillage and some large forestry estates can also be found. Open lands with medium sized field patterns allow good and extensive visibility to the surrounding environs. Settlement patterns in this area are linked to the presence of large towns such as Piltown and Mooncoin, with a dispersed scattering of farm dwellings throughout the rural area.

# 4.7.3.- Boundary Determinants

The boundaries of this unit are directly derived from the subsoils, soils and topography of the area, which largely coincides with the geology, and is further confirmed by the groundwater vulnerability and the existing land uses.

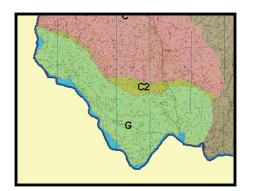


Figure 18.- South Kilkenny Lowlands (Area G)

# 4.7.4.- Critical Landscape Factors

#### • Smooth Terrain

The smooth terrain and the generally gentle topography of lowlands is characteristic of this landscape character unit, allowing vistas over long distances. As a result development can have a disproportionate visual impact in areas, due to an inherent inability to be absorbed either visually or physically.

#### • Low Vegetation

The grassland, tillage and usually low hedgerows of this area provide similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland and tillage vegetation are uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows intertwined with some trees partially screen low-lying land parcels. Nevertheless, the generally low vegetation proves unable to absorb new development.

#### • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of coniferous and deciduous plantations. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 13 Lowland tillage fields (i.e. smooth terrain and low vegetation) at South Kilkenny Lowlands and open mountain views to the uplands

# **River Valleys**

### 4.8.- The Nore Valley

#### 4.8.1.- Description

The Nore Valley is an extensive low-lying area of the County, which bisects its central plain, moving in a north to south-east direction. The terrain is undulating with vegetative/wooded slopes, rising from the river valley. This lowland unit, characterised by smooth terrain and low vegetation, has extensive open mountain views (e.g. Castlecomer Plateau, Brandon Hill and the Slieveardagh Mountains).

The slopes of the Nore Valley conform to the general river valley pattern. Natural vegetation (i.e. native trees and shrubs) generally occurs on the floodplain slopes and riverbanks. Grassland is common on gentle slopes and floodplain levels. Some stretches of the valley have deciduous trees lining the slopes with a slow progression into pasturelands.

The area is perceived as being scenic and special in landscape terms, particularly to the north of Kilkenny City and to the south-east around Inistioge and Thomastown where preferred scenic drives are found (refer to Document 2).

#### 4.8.2.- Land Uses

The river valley itself is wooded with mainly broadleaf species and associated shrub characteristic of the County's rural landscape.

Mixed land use predominates, tillage and sheep grazing being most common. Field patterns are of a regular size within this character area and are bounded by hedgerows, which are low and well maintained, some containing trees such as Birch and Alder. Concentrations of tillage lands and the generally low hedges in the lowland valley areas yield extensive views across large fields.

Significant areas of old woodland estate sites, with some areas of semi-natural broadleaf woodlands (including Woodstock at Inistioge, Castlemorris at Knocktopher and Kilcash Wood) are located within this character area. The most prominent designated landscape areas within this unit include Brownstown Wood (proposed NHA S000827) and the semi-natural woodlands near Tullagher village.

The Nore Valley area once comprised old estate holdings, many of which remain prominent features of the landscape, characterised by the remaining old stonewalls and gateposts enclosing large open fields.

Two large industrial units are located within the Nore Valley area and are visually obvious in the landscape, emphasising the relationship between site location, design and enclosure. These industrial units also emphasise that the landscape is a *working one*, as both facilities produce goods for the agricultural sector.

# **4.8.3-** Boundary Determinants

The boundaries of this unit are directly derived from the subsoils of the area, which largely coincides with the topography, soils and groundwater vulnerability, and is further confirmed by existing land uses.

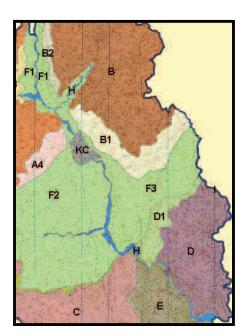


Figure 19.- The Nore Valley (Area H)

# 4.8.4.- Critical Landscape Factors

#### • Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterised this landscape character unit, allow vistas over long distances against a planar surface without breaking up fore and middle ground. As a result development can have a disproportionate visual impact in such terrain, due to an inherent inability to be visually absorbed.

# • Low Vegetation

The grassland, tillage fields and generally low hedgerows of this area provide similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland vegetation and tillage crops are commonly uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows partially screen the lowest land parcels. Nevertheless, the common low vegetation proves unable to absorb new development.

# • Localised River Views

This character unit follows the path of the Nore River, which is easily accessible by road. Due to the low lying nature of this area, many views of the river valley are available from the local roads and from viewing points located along the valley trail. The main concern for natural linear features such as this is to avoid visual intrusion by development, which will interrupt and reduce the integrity of the river valley.

# • Undulating topography

Undulating topography is presented at some sections of this character unit, where the land gently rises at floodplain slopes. This provides a physical shielding and visual enclosure of a built form within the river valley, where it does not break the skyline and thus, renders it visually unobtrusive of the overall landscape scale.

# • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of natural and native woodland that grows on the floodplains of the river. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can

provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 14 Localised views of the River Nore, with low vegetation throughout a smooth landform

# 4.9.- The Barrow Valley

# 4.9.1.- Description

The Barrow Valley is an extensive river valley flowing in a north-south pattern to the east of the County. Many local villages have become well established along the riverbanks, such as Graiguenamanagh and Goresbridge.

The river valley is identifiable by its floodplain levels and slopes of deciduous trees with a slow progression to pasture lands. Running along the Barrow Drive, the riverbanks are predominately grassland. Large tillage fields with few inner boundaries are particular to this area. Estate landholdings are bounded by stonewalls and gateposts with large parcels of grazing lands within.

The terrain is undulating with extensive views of mountains (Castlecomer, Freagh and Brandon Hills and South Leinster Way) and coniferous plantations (along Brandon Tow Path). Distant views also include the Blackstairs Mountains in Co. Carlow.

The area is perceived as highly scenic as well as special and sensitive in landscape terms, providing significant visual amenity value to the County (refer to Document 2). Consequently it is considered to have tourism potential, particularly around Graiguenamanagh.

# 4.9.2.- Land uses

The fertile valley area is well drained providing mixed uses such as agricultural and horticultural crops. Nevertheless, pasturelands generally occupy the riverbanks. Small to medium field parcels are an attribute of this unit. There is a large proportion of the surrounding valley landscape used for conifer forest estate plantations. It is noticeable that poplar trees are commonly used in this area as boundary screening for residential units.

The local population is concentrated into to the large town of Graiguenamanagh, with few scattered houses in the rural hinterland.

# 4.9.3.- Boundary Determinants

The boundaries of this unit are directly derived from the subsoils of the area, which largely coincides with the topography and groundwater vulnerability, and is further confirmed by existing land uses.



Figure 20.- The Barrow Valley (Area I to the right)

# 4.9.4.- Critical Landscape Factors

# • Smooth Terrain

The smooth terrain and the generally gentle topography of river valleys characteristic of this landscape character unit, allow vistas over long distances. As a result development can have a disproportionate visual impact in areas, due to an inherent inability to be visually or physically absorbed.

# • Low Vegetation

The grassland and common low hedgerows of this area provide similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland vegetation is usually uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows partially screen the lowest land parcels. Nevertheless, the generally low vegetation proves unable to absorb new development.

# • Localised River Views

This character unit follows the path of the River Barrow. Due to the low lying nature of this area, many views of the river valley are available from the local roads and from viewing points located along the hilltops (i.e. Castlecomer and Brandon). The main concern for natural linear features such as this is to avoid visual intrusion by development, which will interrupt and reduce the integrity of the river valley.

# • Undulating topography

Undulating topography is presented at some sections along the river valley, where the land gently rises at floodplain slopes. This provides a physical shielding and visual enclosure of a built form within the river valley, where it does not break the skyline and thus, renders it visually unobtrusive on the overall landscape scale.

# • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of natural and native deciduous woodland that grows on the floodplains of the river. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 15 Localised views of the River Barrow with undulating topography and natural deciduous trees on floodplain slopes

### 4.10.- The Suir Valley

### 4.10.1.-Description

The Suir valley lies at the southern County boundary, close to Waterford City. The valley moves in a west to north-east direction, parallel with the Waterford-Kilkenny boundary. It is a wide and fertile valley, traditionally associated with dairying and more recently with fruit and horticultural nursery sectors.

The terrain is undulating with extensive views of Brownswood Hill and the Carrigatubbrid Wooded slopes. Distant views also include those of the Slievenamon and the Comeragh Mountains. The slopes of the Suir Valley conform to the general river valley pattern of pasture lands rising to slopes and the river flood plain, as outlined in Section 3.8.

The river valley is perceived as having special scenic and landscape value, in particular to the west, near the towns of Mooncoin and Fiddown, and to the east around Glenmore (refer to Document 2). The area is considered to have tourism development potential.

### 4.10.2.- Land Uses

The fertile valley area is well drained providing mixed uses such as agricultural and horticultural crops. Nevertheless, pasturelands generally occupy the riverbanks. Open lands with medium field parcels are generally delineated by medium sized hedgerows.

Local landscape features include a waterfall at Poll an Easa which is surrounded by trees and gorse. This gently flowing landscape has a dispersed settlement pattern, once outside the village boundaries. Large forestry plantations of mixed age occur at certain locations. In the Kilmacow area, large power lines are visible, intruding in the landscape.

# 4.10.3.- Boundary Determinants

The boundaries of this unit are directly derived from the subsoils of the area, which largely coincides with the topography, groundwater vulnerability and geology.

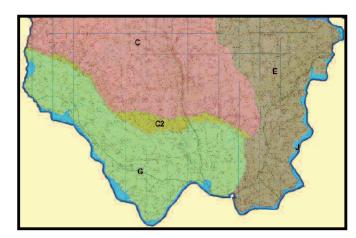


Figure 21.- The Suir Valley (Area J)

# 4.10.4.- Critical Landscape Factors

# • Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterised this landscape character unit, allows vistas over long distances.

# • Low Vegetation

The grassland, tillage fields and generally low hedgerows of this area provide similar characteristics to smooth terrain in landscape terms. Grassland vegetation and tillage crops are usually uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows partially screen lowest land parcels. Nevertheless, the common low vegetation proves unable to absorb new development.

#### • Localised River Views

This character unit follows the path of the Suir River, which is easily accessible by road. Due to the low lying nature of this area, many views of the river valley are available from the local and national roads. The main concern for natural linear features such as this is to avoid visual intrusion by development, which will interrupt and reduce the integrity of the river valley.

### • Undulating topography

Undulating topography is presented at some sections of this character unit, where the land gently rises at floodplain slopes. This provides a physical shielding and visual enclosure of a built form within the river valley, where it does not break the skyline and thus, renders it visually unobtrusive of the overall landscape scale.

### • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of natural and native woodland that grows on the floodplains of the river. In a similar manner to undulating topography, shelter vegetation has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 16 Shelter vegetation and localised river views at Poll an Easa Waterfall



Plate 17 Smooth terrain at the Suir Valley, with distant hill views onto Co. Tipperary

# Transition Lands

# 4.11.- The Slieveardagh Transition

# 4.11.1.- Description

The Slieveardagh transition encompasses the lands that are encountered between the Slieveardagh Hills and the surrounding lowlands and river valleys. There are slight differences within the area with regards to the subsoils, geology and groundwater vulnerability, and consequently vegetation, therefore, the Slieveardagh transition area has been subdivided into 4 subunits as follows:

- A1 Slieveardagh Western Transition Area
- A2 Slieveardagh Central Transition Area
- A3 Slieveardagh Eastern Transition Area
- A4 Slieveardagh Southern Transition Area

The western transition area is an expansive area at the boundary of Tipperary and Kilkenny, encompassing the towns of Crosspatrick and Cullahill. The middle transition area runs along the western base of the hills whose established settlement areas include Urlingford and Johnstown.

The eastern transition area runs along the base of the northern Slieveardagh Hills and parallel to the River Nore valley. The towns of Freshford, Dunningstonw and Lisdowney are within this transition area. The southern transition area is a linear strip running in an east-west direction from the outskirts of Gortfree to the boundary of Kilkenny City and the River Nore valley.

The transitional areas of the Slieveardagh uplands are not perceived as being of a special or sensitive nature. Furthermore, A2 and A3 areas are perceived as having high acceptability for potential development (refer to Document 2).

# 4.11.2.- Land Uses

Pasturelands are the general land use of this landscape character unit. The western, middle and eastern Slieveardagh transition areas have contained views towards Kilkenny City and generally medium sized fields bounded with scrub (unmaintained) hedgerows and low trees. The generally moorland land cover in the western unit (A1) with some large area of peat bog to the south indicates poor pasturelands. Some tillage and a predominance of forestry to the western margins occur. The presence of bog rushes indicates a high water table and the groundwater vulnerability in these areas is extremely high.

In the middle and eastern subunits (A2 and A3 respectively) conifer forestry covers significant areas, although pastureland continues to be the common land use. Similarly to the western subunit, these areas have zones of poorly drained soils and low quality pasturelands as a consequence. The area presents high groundwater vulnerability. However, within the entire Slieveardagh transitional area, subunit A2 is deemed to have the better tillage land.

The soils of the southern transition area (i.e. A4) indicate poor drainage with the presence of scattered limestone outcrops. A sense of enclosure is gained through large, unmaintained hedgerows bounding the roadsides. Fields are generally of a medium size with low trees and moorland vegetation, rendering poor quality pasturelands.

# 4.11.3.- Boundary Determinants

The boundaries of this unit directly derive from the soils and subsoils of the area, which largely coincides with the topography and geology, and is further confirmed by the groundwater vulnerability and the existing land uses.

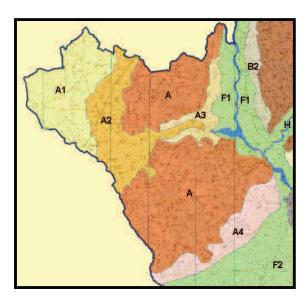


Figure 22.- Slieveardagh Transition (Areas A1, A2, A3 & A4)

# 4.11.4.- Critical Landscape Factors

### • Low Vegetation

Predominantly low vegetation as represented in this unit by moorland and pastureland grasses is generally uniform in appearance, failing to break up vistas, and allowing long distance visibility.

# • Undulating topography

Mildly undulating topography is presented in the western subunit (A1) and provides the ability to both shelter and absorb the visual impact of development where it does not break the skyline, rendering it visually unobtrusive and reflective of the overall landscape scale.

# • Shelter Vegetation

Shelter vegetation, represented in this unit by existing conifer plantations (particularly in subunits A2 and A3) and some tall tree hedgerows, has a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 18 High water table and some shelter vegetation characteristic of this transitional area



Plate 19 Low vegetation (low quality pastureland) and shelter hedgerows

# 4.12.- The Castlecomer Transition

#### 4.12.1.- Description

This character unit may be subdivided into the south Castlecomer Transition (B1) and the west Castlecomer Transition (B2), as illustrated on Map 13. Both areas present similar characteristics. The western area is a long linear strip of land, running in a north-south direction, which is parallel to the River Nore Valley and close to the Dinin River. The area encompasses the environs of Ballyragget and Castlemarket areas. The southern area is a larger land parcel, which is located within the environs of Ballyfoyle to Paulstown, following the low lying slopes of the Castlecomer Hills, until reaching the Kilkenny Basin and the Nore Valley (north) at Mohil.

Intermittent views of the Castlecomer Plateau are common to both areas. In the southern transition area, intermittent views of Knockadeen Hill are also common.

These transitional areas are not perceived as having special landscape or scenic amenity values and are considered suitable for development (refer to Document 2).

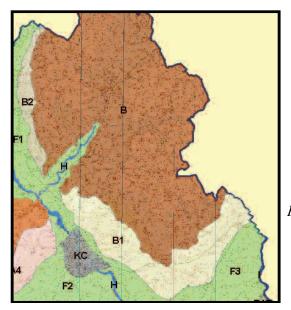
### 4.12.2.- Land Uses

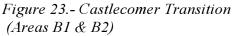
Both transition areas are characterised by poor drainage, illustrated by the presence of bog rushes in certain areas. Pasturelands present the main land use of the areas, with low and poorly maintained hedgerows: many of the roadside and field hedgerows are intertwined with briars. Medium sized fields are a characteristic of this unit, which are commonly bounded by ash trees. The forestry plantations at Tullowglass and Jenkinstown are within the western Castlecomer transition area.

The population density of this area is low, with most settlement occurring within the established towns and villages (Caslecomer, Dunmore, Johnswell, Ballyragget etc.), with some scattered rural housing.

# 4.12.3.- Boundary Determinants

The boundaries of this unit directly derive from the subsoils and geology of the area, which largely coincides with the topography, and is further confirmed by the soils, groundwater vulnerability and existing land uses.





# 4.12.4.- Critical Landscape Factors

### • Smooth Terrain

This unit is characterised by smooth, sloping terrain, which allows vistas over long distances. In such terrain, development can have a disproportionate visual impact in some areas, due to an inherent inability to be absorbed, physically or visually.

# • Low Vegetation

Predominantly low vegetation as represented in this unit by pastureland and moorland grasses has similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland and moorland vegetation fails to break up vistas, allowing long distance visibility.

### • Slopes

The low-lying slopes of the Castlecomer Plateau fall within this landscape character area. Sloping land provides a potentially increased elevation intensifying visual prominence over greater distances. Slope often provides an area with its character, and is therefore equally sensitive to development that might impact on that character.

### • Shelter Vegetation

Shelter vegetation, represented by the existing conifer plantations, provides a shielding and absorbing quality in landscape terms. It can provide a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 20 Views towards Castlecomer Plateau. The generally low vegetation contrasts with the conifer forests (i.e. shelter vegetation)



Plate 21 Slopes and shelter vegetation

# 4.13.- The Brandon Hill Transition

# 4.13.1.- Description

This transition area is located near the base of the Brandon Hills. It runs close to the River Barrow, west from Ballynakill (outside Graiguenamanagh), to Ballygallon (outside Inistioge).

This transition area from a part of the South Lenister Way from Graiguenamanagh to Inistioge, with intermittent views of Brandon Hill and the two River valleys (Barrow and Nore).

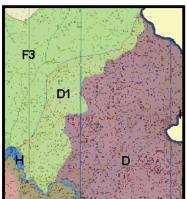
This transition area is not perceived to hold any special or sensitive landscape areas, however it is perceived as having a favourite scenic drive within the County(refer to Document 2)

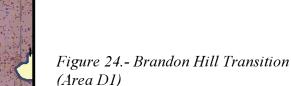
# 4.13.2.- Land Uses

Mixed land uses are a feature of this transition area. Pasturelands continue to be the general characteristic of the region, however, tillage is also a common land use. Scrub hedgerows with intertwined trees are typical field delineators. High water table is a feature of this unit. At certain areas, low levels of land management are illustrated by unimproved pasturelands and the presence of wild shrubby birch and ash trees throughout the fields.

# 4.13.3.- Boundary Determinants

The boundaries of this unit directly derive from the subsoils of the area, which largely coincides with the topography, geology and soils, and is further confirmed by groundwater vulnerability and existing land uses.





# 4.13.4.- Critical Landscape Factors

# • Low Vegetation

Predominantly low vegetation as represented in this unit by grassland, tillage crops and low hedgerows, fails to break up vistas, and allows long distance visibility. It is this inability to visually absorb development that identifies low vegetation as a critical landscape factor. Nevertheless, existing trees at some sections of field hedgerows partially screen some of the lands.

# • Slopes

The low-lying slopes of Brandon Hill fall within this landscape character unit. Sloping land provides a potentially increased elevation intensifying visual prominence over greater distances. Slope also provides an area with its character, and is therefore equally sensitive to development that might impact on that character.



Plate 22 Smooth terrain and low vegetation have an inability to absorb development – Note the disproportionate visibility of the industrial development to the left.

# 4.14.- The South Western Transition

# 4.14.1.- Description

This transition area has been subdivided into two parts (as illustrated in Map 13) due to existing differences on landscape physical features (i.e. subsoils, soils, geology and topography).

- CI South Hills Transition Area (northwest)
- C2 South Hills Transition Area (south)

These transition areas encircle the Kilmacoliver and Carricktriss Mountains, with subunit C1 beginning in the environs of Windgap village and subunit C2 running from Tubbrid to Owning - This transition area passes close to the South Leinster Way. These transition units are tight as a result of the abrupt transition from the lowlands to the south western uplands in the area.

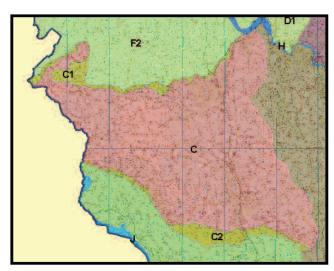
This unit is perceived as having no special landscape or scenic value (refer to Document 2).

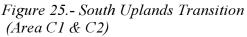
# 4.14.2.- Land Uses

This transition area comprises mainly pasturelands and some conifer and deciduous tree plantations. The fields are bounded by scrub and furze hedgerows and high water-table lands, characterised by bog rushes are found at certain areas. Lake views are contained within the landscape unit with limited long distance views. Characterised as a very rural area, the landscape has a scattered, low-density settlement pattern. Traditional farmyards, set back into the landscape are found within this character area.

# 4.14.3.- Boundary Determinants

This unit's boundaries derive from the topography of the area, which largely coincides with the subsoils and geology, and is further confirmed by the soils and existing land uses.





# 4.14.4.- Critical Landscape Factors

# • Smooth Terrain

This unit is characterised by smooth, sloping terrain, which allows vistas over long distances. In such terrain, development can have a disproportionate visual impact, due to an inherent inability to be absorbed, physically or visually.

# • Low Vegetation

Predominantly low vegetation, represented in this unit by grassland and moorland land cover, has similar characteristics to smooth terrain in landscape terms, and the two are often interrelated due to soil attributes. Grassland and moorland vegetation fails to break up vistas, and allows long distance visibility.

# • Shelter Vegetation

Shelter vegetation, represented in this unit by a number of forest areas, has a screening and absorbing quality in landscape terms. It provides a natural visual barrier and also adds to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Plate 23 Smooth terrain and low vegetation with scattered housing

# 5 Landscape Sensitivity

## 5.1.- Introduction - Landscape and Visual Impacts

#### The *Landscape* is described as embracing:

"All that is visible when one looks across an area of land"<sup>10</sup>

Every landscape evolves and can be affected to some degree by new developments. For the purpose of development control and to avoid disproportionate visual impacts and effects on the landscape and the community as a whole, it is important to work out the extent of the land visually affected by any proposed development. Nevertheless, it is as important to assess the landscape capacity to absorb change.

Consequently, and for the purpose of this document, landscape features are classified with regards to their degree of sensitivity, i.e. the capacity of the landscape to absorb new development without causing disproportionate visual impacts. The landscape is made up of a series of compartments each of which has a distinctive character. Each unit of character is assigned an indicator of sensitivity, which indicates the extent to which the landscape will be vulnerable to change in its character. The categories will reflect the criteria of the capacity to absorb new development as well as the potential to create disproportionate visual impacts.

The capacity of an area to visually absorb development is influenced by a combination of the following factors:-

- 1) *Topography* development in elevated areas will usually be visible over a wide area; development in enclosed areas will not.
- 2) *Vegetation* areas which support (or which have the potential to support) trees, tall hedges and woody vegetation can screen new development from view. Areas which cannot easily sustain such vegetation will be unlikely to screen new development.
- 3) *Development* New development is less likely to be conspicuous in the context of existing development in the landscape.

In Summary:-

- Areas where enclosing topography, screening vegetation and/or existing development are present should have a **high potential** to absorb new development.
- Areas of elevated topography, with low growing or sparse vegetation and little existing development should have a **low potential** to absorb new development.

The landscape factors for each of the Landscape Character Units described in Section 4, help to identify the landscape sensitivity and development absorption capacity of County Kilkenny landscapes.

To further define the extent and location of sensitive landscape areas and features within each of the Character Units, the occurring landuses area analysed.

<sup>&</sup>lt;sup>10</sup> Guidelines for Landscape and Landscape Assessment, Department of the Environment, 2001

KEY	DESCRIPTION
1 = Degraded	Areas characterised by breakdown of natural processes or pollution (e.g. cut over bogs,
	old mineral waste areas)
2 = Robust	Areas of existing development and infrastructure. New development reinforces existing
	desirable landuse patterns.
3 = Normal	A common character type with a potential to absorb a wide range of new developments.
4 = Sensitive	Distinctive character with some capacity to absorb a limited range of appropriate new
	developments while sustaining its existing character.
5 = Vulnerable	Very distinctive features with a very low capacity to absorb new development without
	significant alterations of existing character over an extended area.

The categories in the **Sensitivity Zoning Key** are as follows:

Table 7. Sensitivity Zoning Key

#### **5.2.-** Vulnerable Landscapes

Vulnerable landscapes are defined by linear environmental features such as the shores of the main water bodies (lakes, large rivers, coasts, estuaries) and the ridges or skylines of mountains, hills, promontories and headlands. Major skylines are visible over a wide area (any area will be visible against the skyline if viewed from a lower elevation).

These are all conspicuous features of the natural landscape to which the eye is drawn because of strong contrasts of form and colour where there is contact between the land and sky or water. Therefore, they represent vulnerable features on the landscape as any development on or in the vicinity of shores or skylines has the potential to affect the visual integrity of the surrounding environment.

#### 5.3.- Sensitive Landscapes

Sensitive landscape areas are determined by combining the following landuse categories from the CORINE Land Cover<sup>\*</sup> Project:-

Natural grassland	Bare rocks	Sparsely vegetated areas
Moors and heathland	Transitional woodland scrub	Beaches, dunes, sands
Estuaries	Broad leaved forest	Inland marshes
Water courses	Water bodies	Coastal lagoons
Mixed forest	Agricultural land with significant	
	areas of natural vegetation	

Table 8. Sensitive landuse categories

These landuse categories include areas which are open and exposed with sparse or low growing vegetation cover which is insufficient to provide screening. Even if planting is introduced, the exposed nature of these areas will not support any significant tall vegetation. Due to this, any development would be visible over a wide area. The exception to this are broadleaved, mixed forest and transitional woodland scrub areas which do support tall vegetation with potential to screen development. However these categories are sensitive due to their natural character and their longevity in the landscape; any loss to their structure would have a visual impact over a wide area.

<sup>\*</sup> The CORINE 1996 mapping data does not include units below 25 hectares in extent. Due to this, many small villages and areas of ribbon development are not recorded on the land cover map.

#### 5.4. - Normal Landscapes

Areas included in this category are determined by combining the following landuse categories from the CORINE Land Cover\* Project:-

Pasture lands	Non irrigated arable land	Annual crops associated with permanent crops
Complex cultivation pattern	Coniferous forest	

 Table 9. Normal landuse categories

These landuse categories include the main areas of farming and rural residences. These tend to be confined to low lying or gently undulating areas where conditions are relatively fertile and therefore suitable to support tall vegetation, which could screen and therefore absorb development. The vegetation is often in the form of small copses of trees or mature hedgerows which sub-divide fields.

#### 5.5.- Robust Landscapes

Areas included in this category are determined by combining the following landuse categories from the CORINE Land Cover\* Project:-

Continuous urban fabric	Discontinuous urban fabric	Industrial or commercial units
Airports	Sports and Leisure Facilities	
T 11 10 D 1 41 1 4	•	

 Table 10. Robust landuse categories

These landuse categories include towns and built up areas, suburban and other developed areas. These areas can support new development, as it is less likely to be conspicuous in the context of existing development in the landscape.

Degraded areas can be considered part of the robust areas as new development in degraded areas is desirable as a means to improve the existing character of the site. Degraded areas are characterised by the breakdown of natural processes or pollution, including the following landuse categories from the CORINE Land Cover Project:-

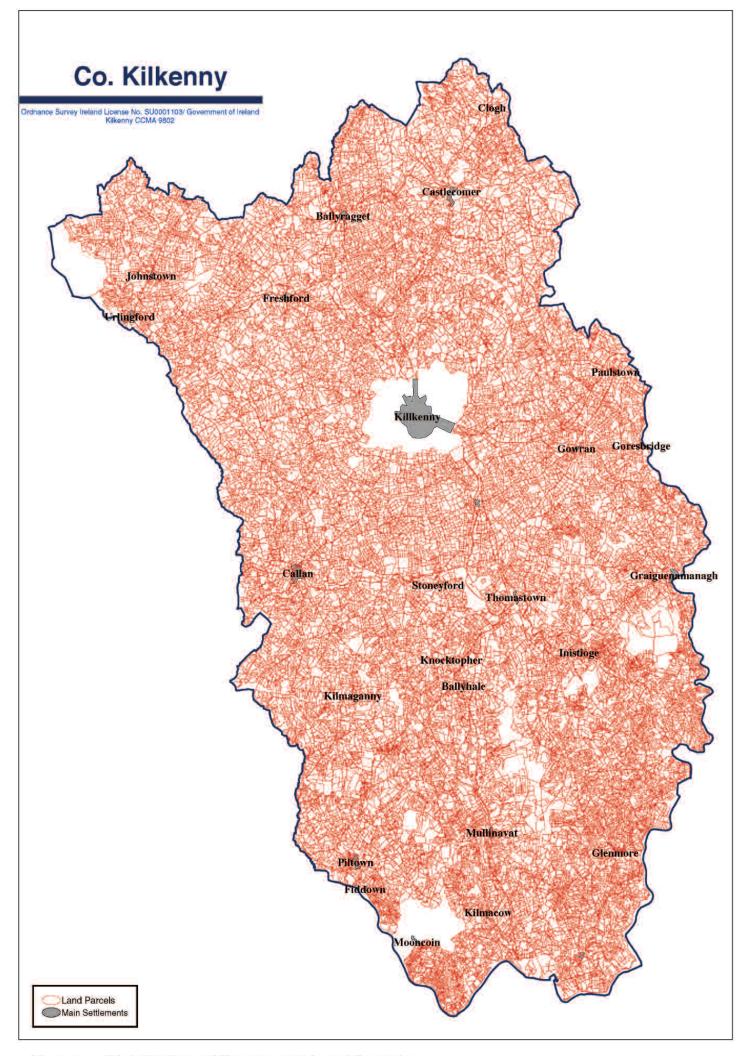
Mineral extraction sites	Construction sites	Dump sites
Table 11. Degraded landuse cate	gories	

#### 5.6.- Landscapes Sensitivity Mapping

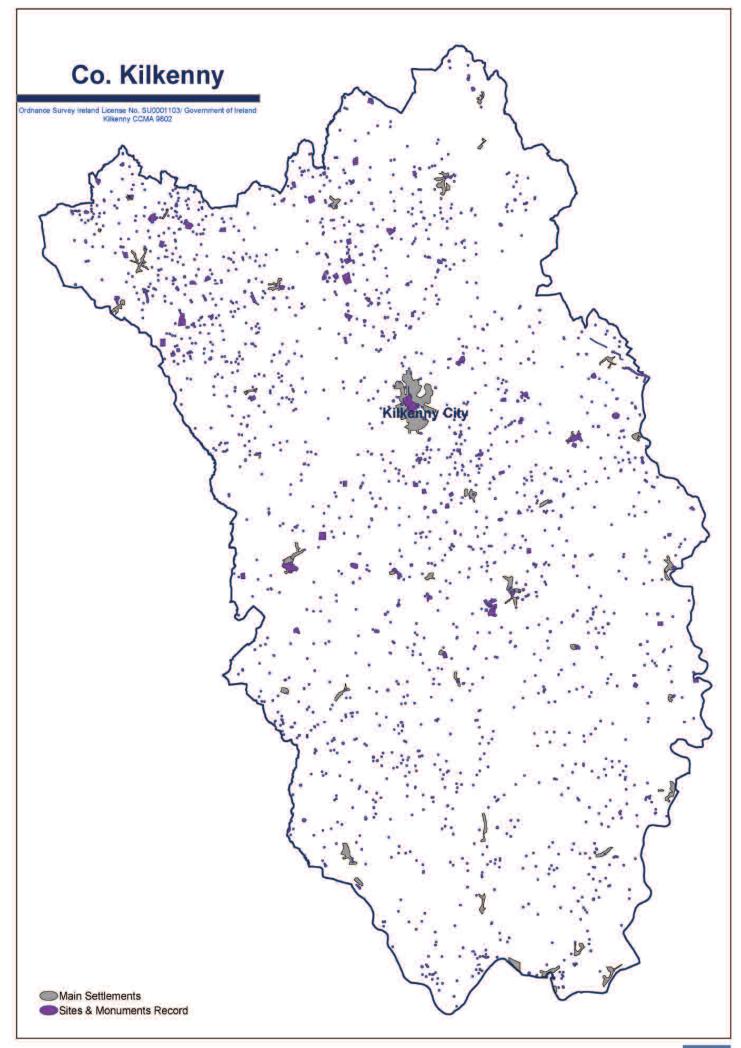
Topographical and land cover information are used to determine the categories of landscape sensitivity for County Kilkenny (i.e. *Vulnerable, Sensitive, Normal and Robust*).

Topographic, contour and raster maps are used to determine vulnerable features, whilst the determination of the limits of the other categories is based upon existing data (i.e. CORINE), which is mapped using objective, established and systematic techniques.

Map 14 shows the categorisation of landscape sensitivities for County Kilkenny. These are further described and dealt with in Document 3.

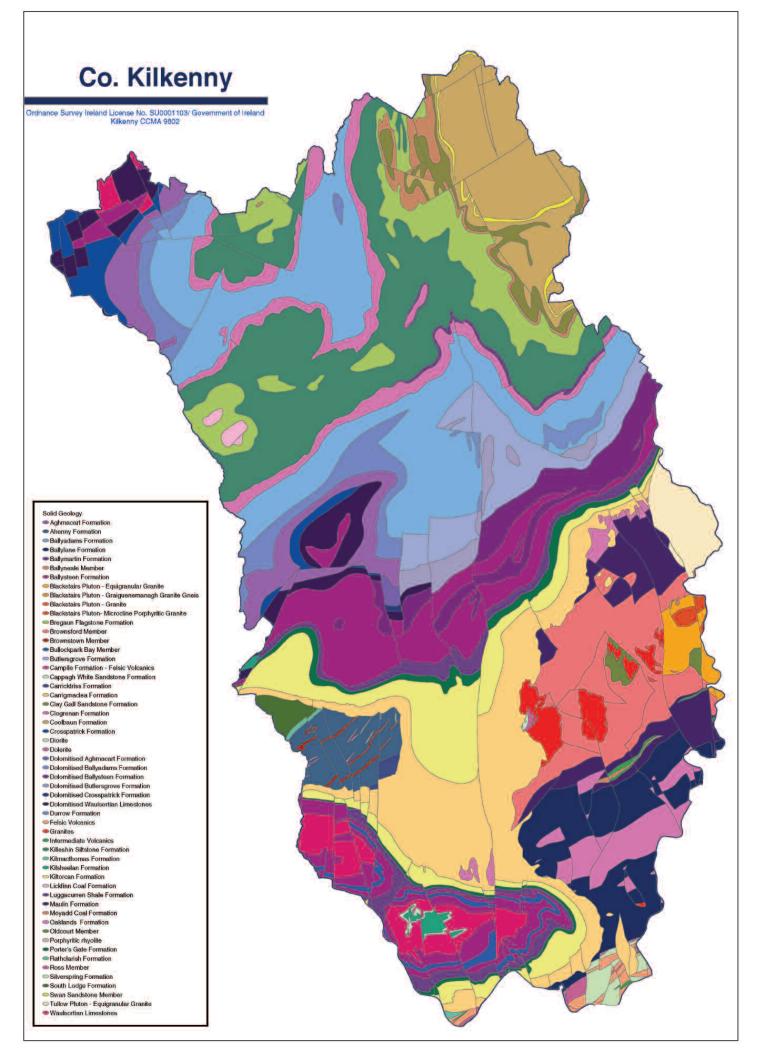


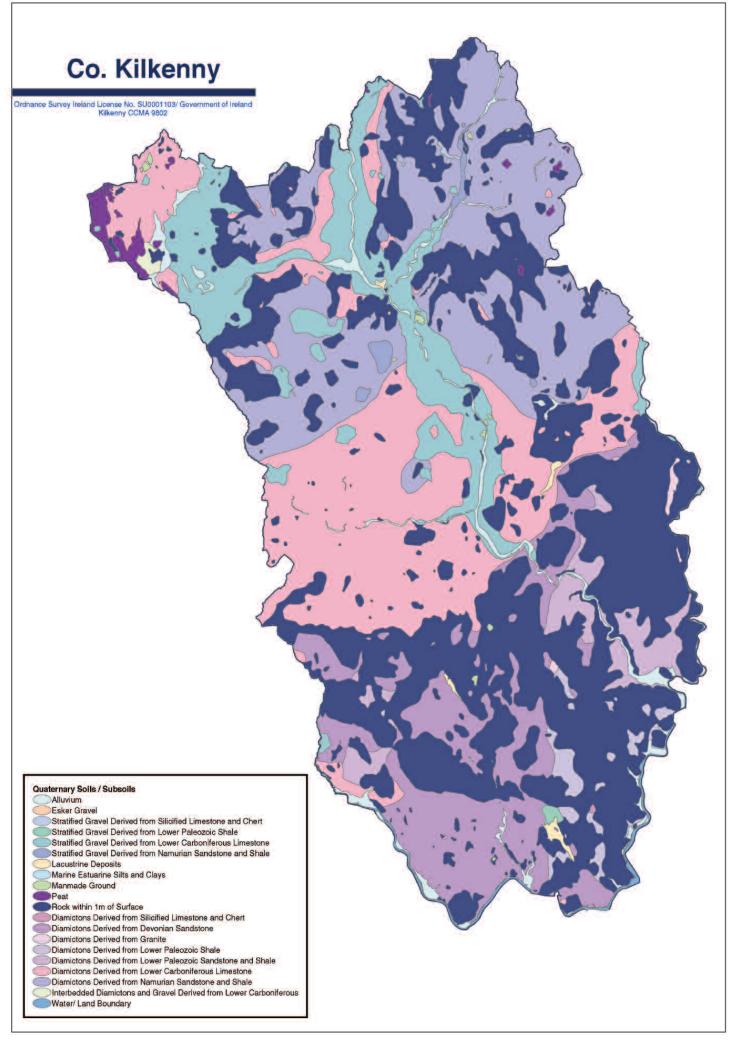
Map 1.- Distribution of Towns and Land Parcels



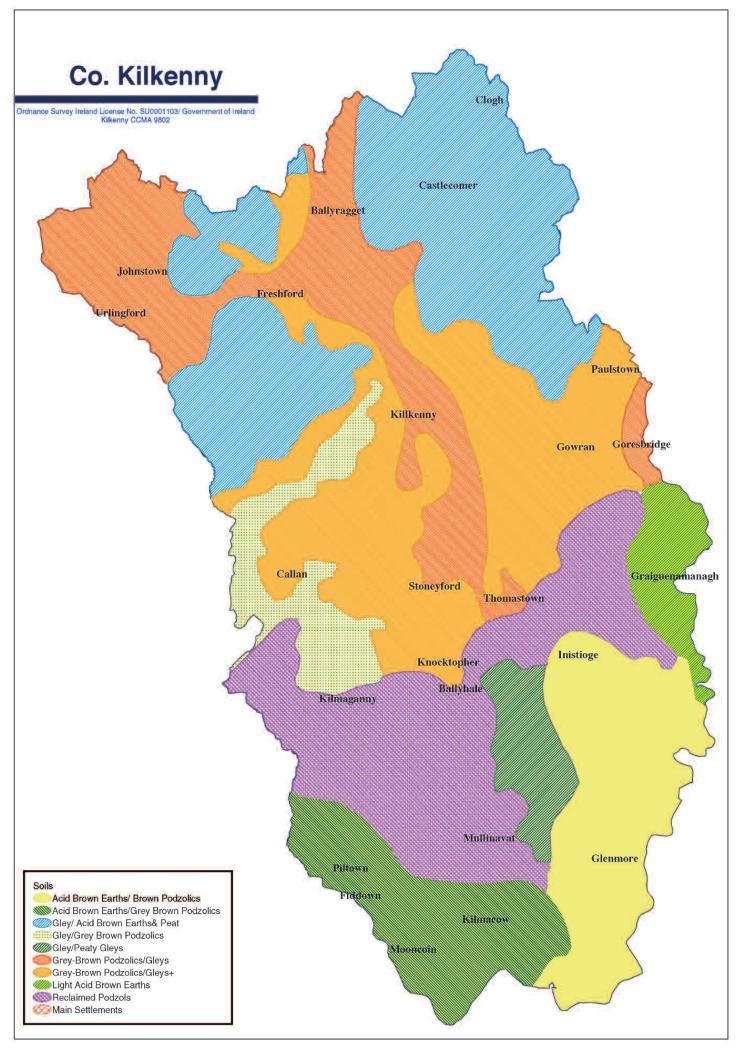
Map 2.- Distribution of Sites and Monuments Source: Duchas - The Heritage Service



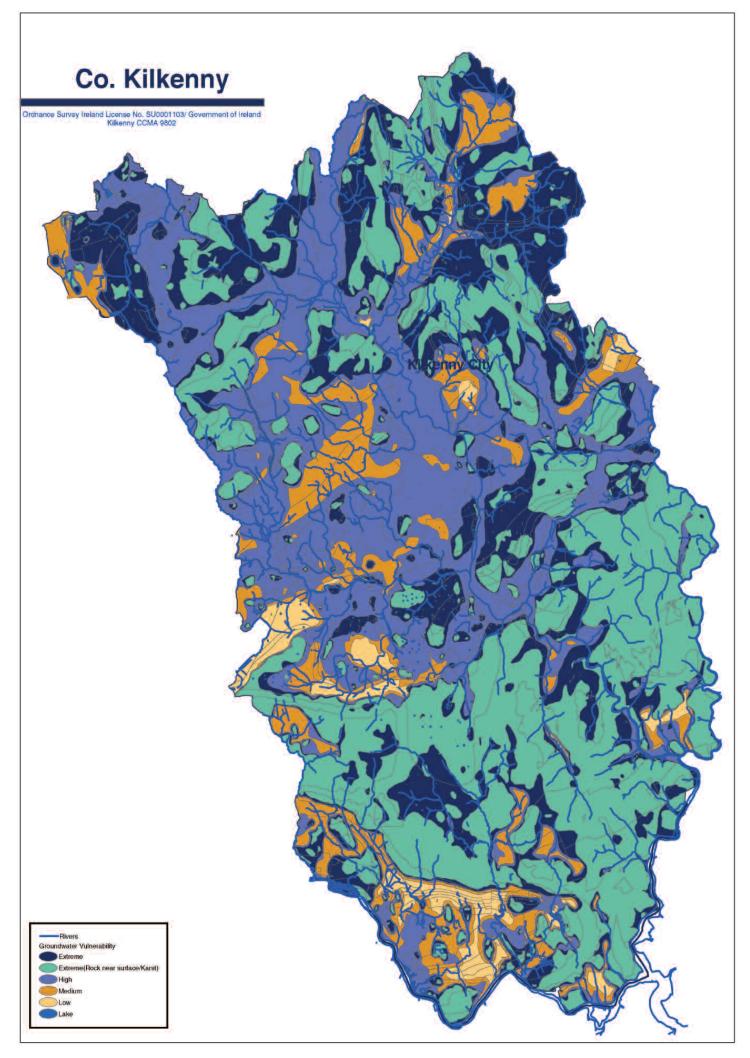




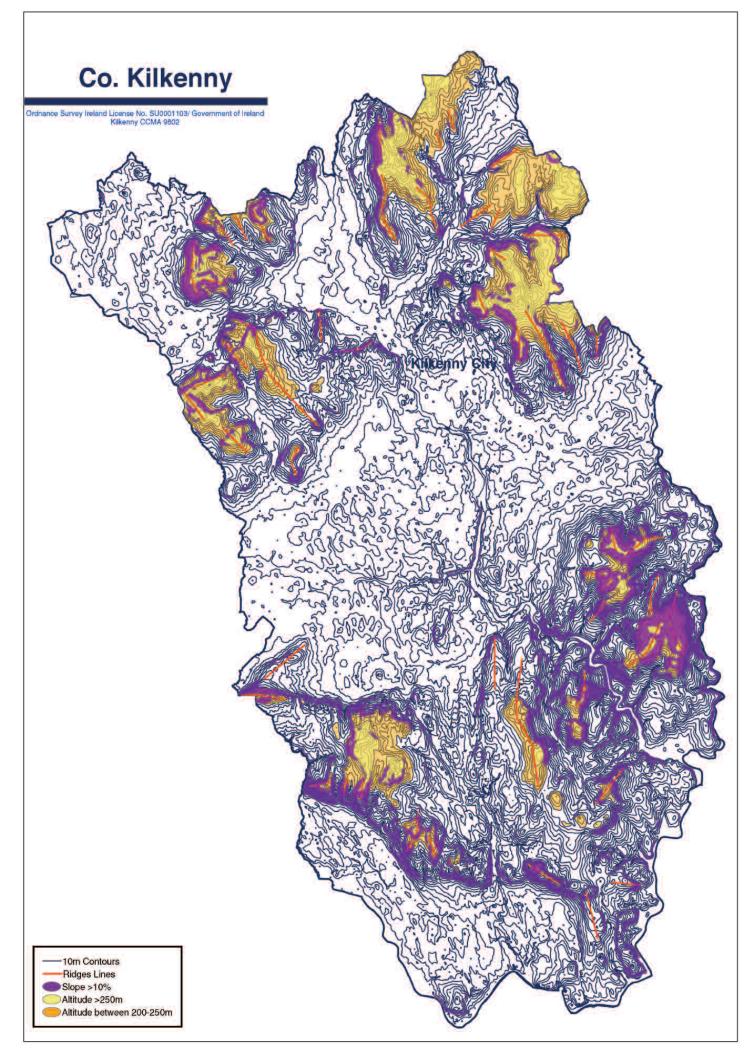
Map 4.- Subsoils (Quaternary Soils) Source: Geological Survey of Ireland



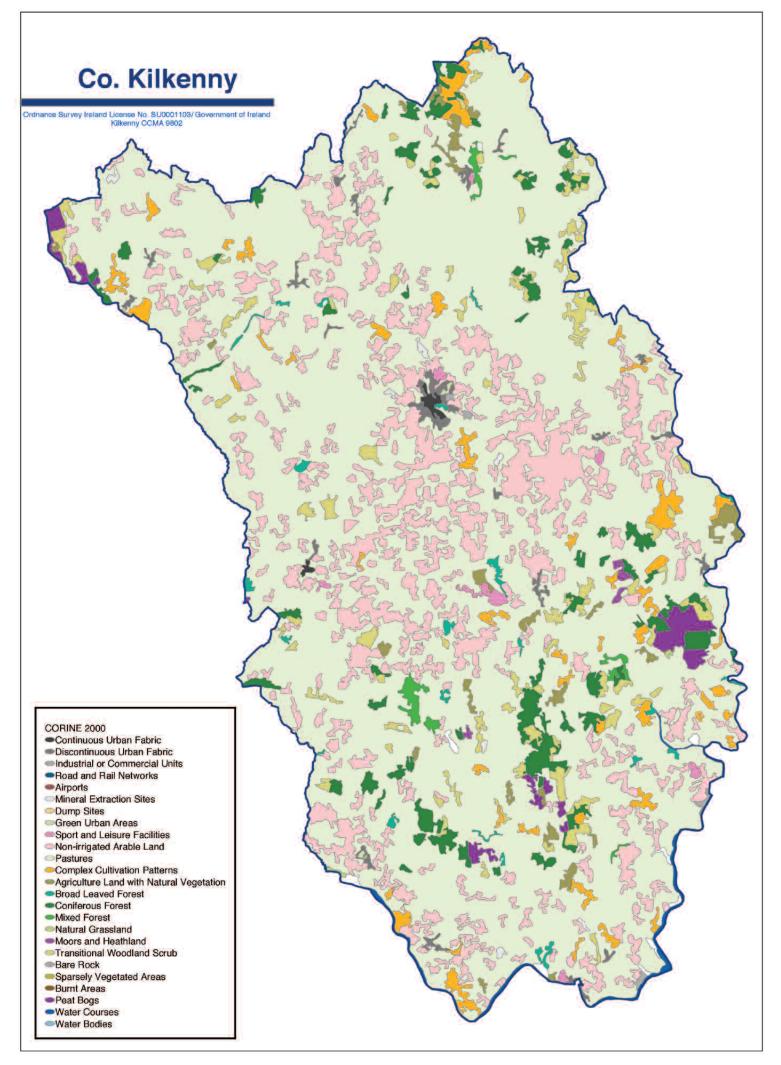
Map 5.- Soils Source: National Soils Survey of Ireland, 1979



Map 6.- Groundwater Protection Source: Geological Survey of Ireland and OSI

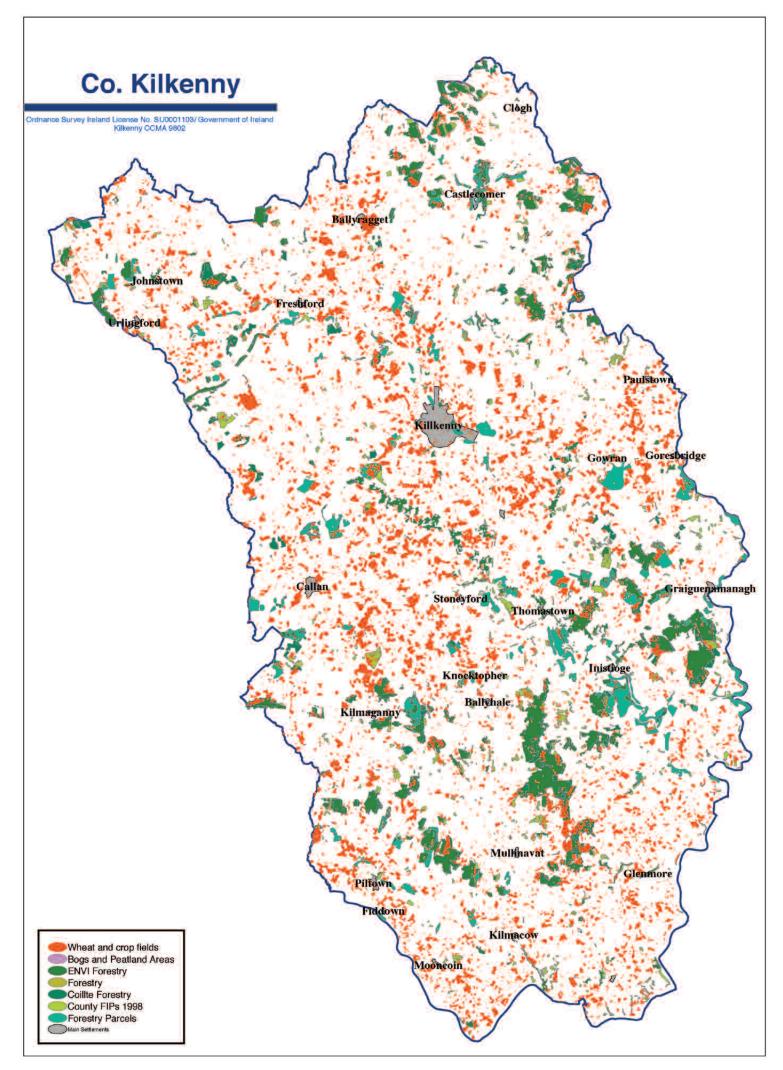


Map 7.- Topography Source: Kilkenny County Council and OSI

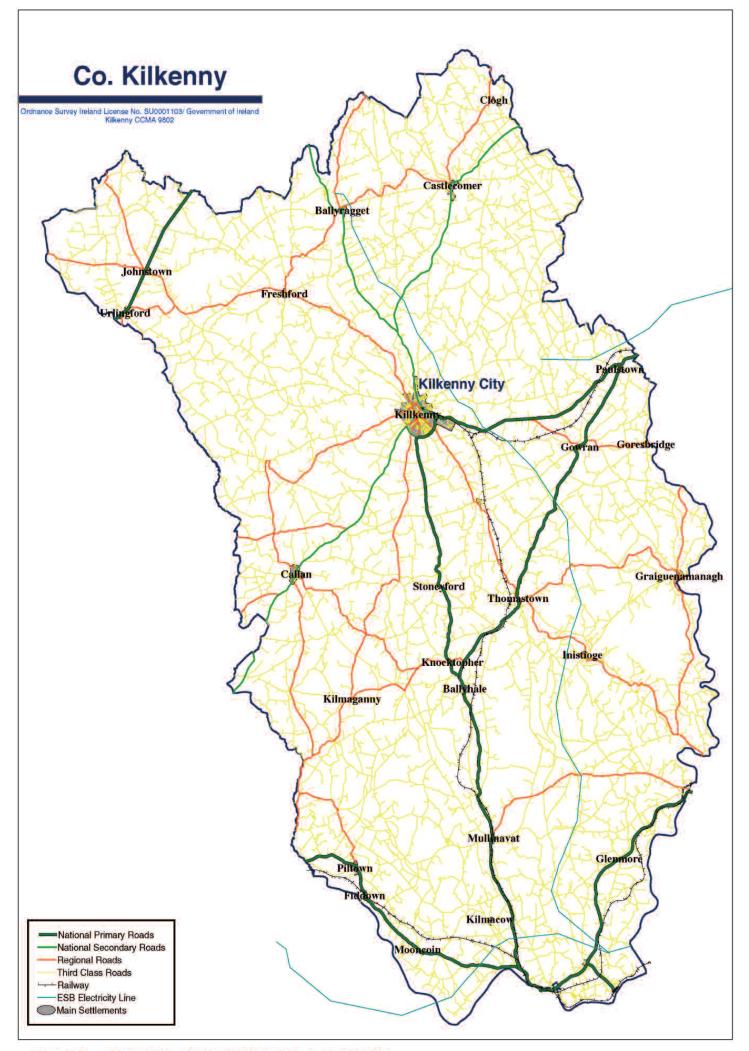


#### Map 8.- CORINE Land Cover

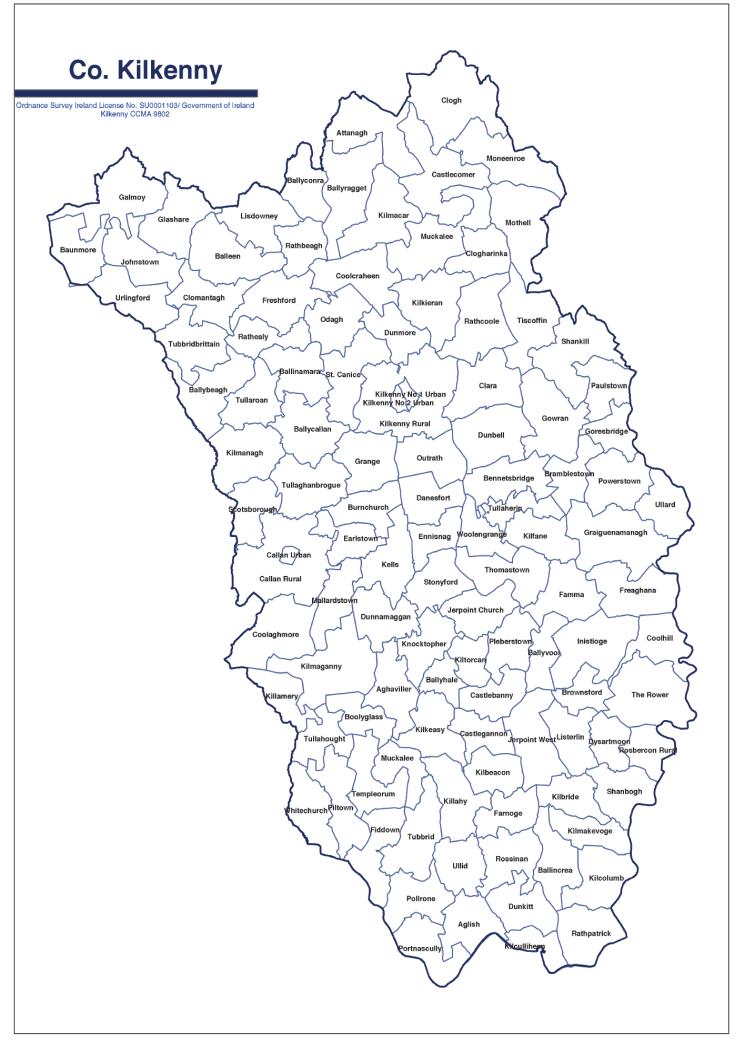
Source: CORINE 2000

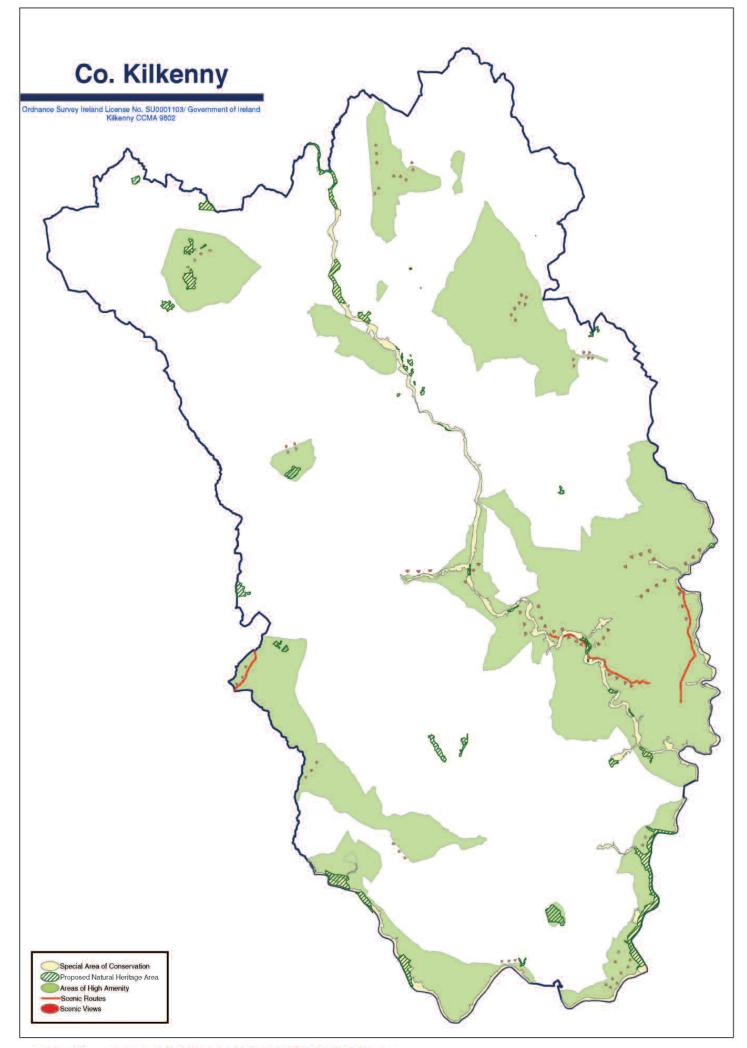


Map 9.- Land Uses Source: Coillte, Forest Inventory Project and Teagasc

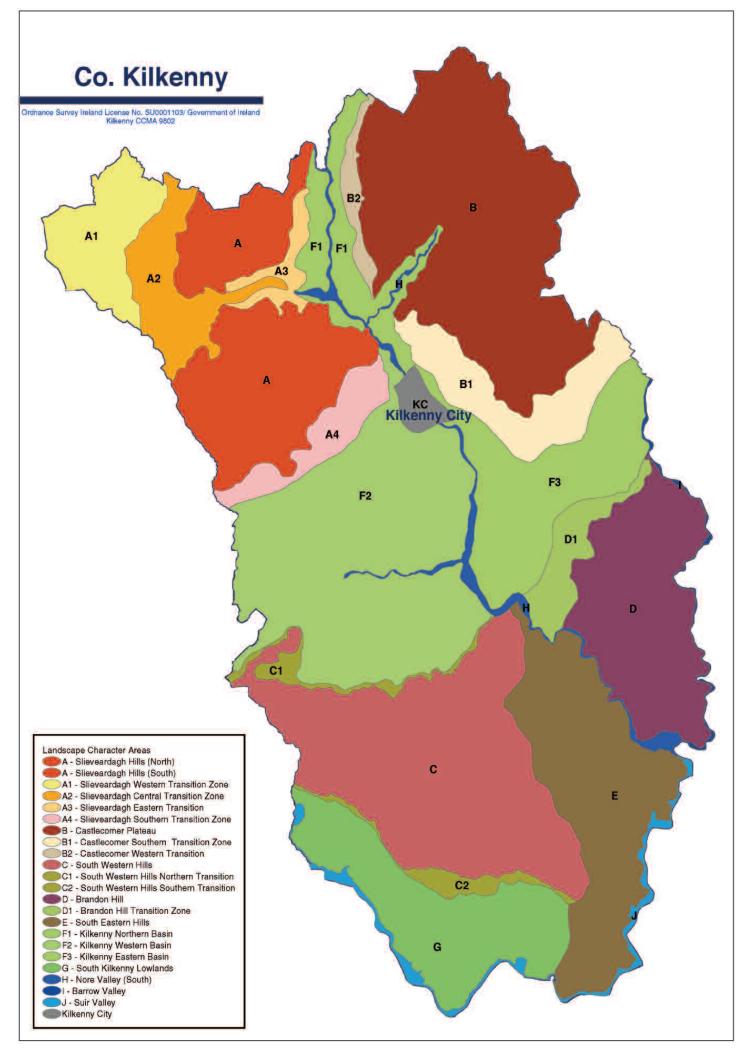


Map 10.- Main Population Centres and Roads

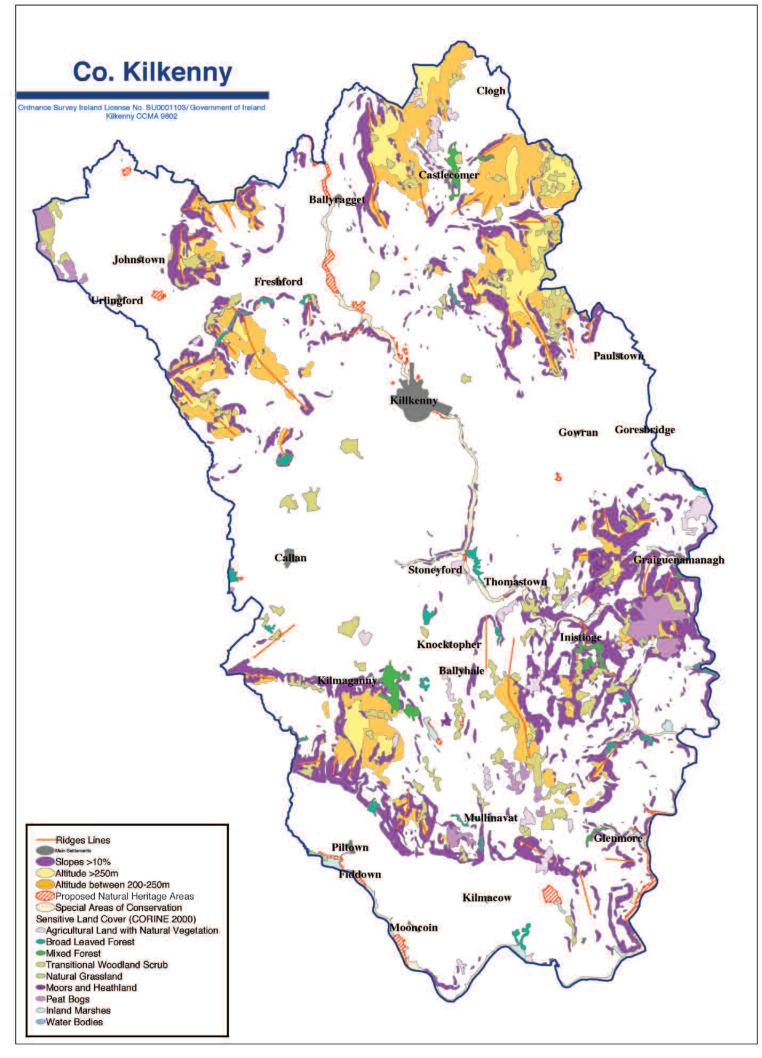




Map 12.- Ecological and Natural Designations



Map 13.- Landscape Character Areas



Map 14.- Landscape Sensitivities

Landscape Appraisal

of





# **Document 2**

Prepared for

# Kilkenny County Council

By



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October 2003

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## **1.-** Terms of Reference

CAAS Environmental Services has been commissioned by Kilkenny County Council to prepare a Landscape evaluation report for the county. The appraisal has been carried out with regard to the current 'Landscape and Landscape Assessment Guidelines for Planning Authorities' (Phase two of methodology) and to the Planning and Development Regulations, 2001.

For the purposes of clarity of method, the appraisal has been sub-divided into three documents. This document – 'Hypothesis Testing' forms Document 2 of the landscape appraisal report. It is followed by a third document, which proposes landscape policies for County Kilkenny. Both documents should be consulted with regard to Document 1, where the character of the County landscapes are assessed and identified.

# 2.- Aims and Objectives

In addition to the recognition of the character of the landscape (see Document 1), societal values may also be attached to particular landscapes. Landscape values are described in the Landscape Guidelines<sup>1</sup> as:

'The environmental or cultural benefits, including services and functions, that are derived from various landscape attributes.' (Section 2.2, Page 13)

It is the aim of this document to establish the societal and cultural values and sensitivities of the County landscapes. This will ensure that the formulation of landscape polices (see Document 3) is completed with full regard to the character and value of the landscapes of County Kilkenny.

A parallel objective of this document is to test a hypothesis put forward by the study team as to the areas of *perceived* and *actual* sensitivity and robustness within the County. This objective has been fulfilled in the resulting workshop session where a number of agencies were consulted and the results are presented in Sections 6 and 7 of this document.

<sup>&</sup>lt;sup>1</sup> Landscape and Landscape Assessment Guidelines for Planning Authorities, June 2000

# **3.-** Subjective Values

Landscape values may have a qualifying influence upon development and they will certainly influence or constrain new developments. Thus the identification of values attributed to the landscape and the resulting sensitivity of the countryside is an important tool to ensure that a counter-balance for planning and design is achieved.

The values, which are predominantly attached to the landscape, are included as Table 1 below.

Value	Examples
Aesthetic	Vistas, Scenic Areas, Areas of Special Amenity
Ecological	Special Areas of Conservation, Natural Heritage Areas, Biotopes
Historical	Archeological heritage, Field patterns
Socio-Cultural	Settlements, Monuments, Buildings
Religious	Burial Places, Wells
Mythological	Celtic Legends, Folklore
Table 1 Comr	non Landscape Values

A number of these values have already been examined through the character appraisal process (see Document 1), such as the ecological designations or the settlements and field patterns of the County.

Values may be sometimes less than accurately described as subjective. In order to achieve a consensus on the hierarchy of values attributed to the landscapes of County Kilkenny, a systematic approach has been applied to value identification via a workshop consultation process to ensure that a broad spectrum of opinion has been gathered.

Sensitivity is evaluated in relation to values and the established landscape character (see Document 1). The most evident manifestation of sensitivity include the designations within the County – e.g. Area of Scientific Interest: Castlecomer Estate wood. Sensitivity within the landscape corresponds to the ability of the landscape to absorb new development and to the type and scale of development placed therein.

Sensitive landscapes are described as those areas that entail sensitive landscape factors, e.g.. areas which are open, elevated, steeply sloping or otherwise visually exposed, with sparse or low growing vegetation cover, which is insufficient to provide screening. As a result, any development in such areas would be visible over a wide area. Conversely, where a wide range of developments would sit comfortably in a particular landscape (i.e. without creating a disproportionate visual impact and without detracting from the landscape character or associated values), the landscape is classed as of low sensitivity. The identification of sensitivities allows the landscape to be categorised and in turn informs the policy identification stage (Document 3).

### 4.- Presentation of the Hypothesis

The hypothesis used at this stage of the appraisal process was formulated to test the perception of the significance and sensitivity of the County landscapes as well as an assumption as to the County landscape areas suitable for development. The hypothesis may be stated as:

That the landscape character areas identified in Document 1 are comparable to those areas of landscape sensitivity and significance perceived by the workshop consultees.

This hypothesis has been tested during the workshop sessions held. The results of the hypothesis testing are outlined in Sections 6 and 7 of this document.

## 5.- Technique of Value Identification

Two primary methods of social and cultural value identification were used in the workshop session held on March 19<sup>th</sup>, 2003. These methods were identified as those best suited to the testing of the central hypothesis and the identification of the landscape values held by the community. These methods are presented below.

#### 5.1.- Questionnaire (Method One)

A short questionnaire was produced which combined textual questions with photographic images and mapping. The main purpose of this tool was to examine the landscape values of the community -i.e. sensitive and special landscape areas. This tool also examined pictorial landscape perceptions -i.e. which illustrated landscape was most aesthetically pleasing etc. Finally the perception of landscapes which were considered 'landmarks' within the county were examined, to ascertain perceived landscapes of County significance.

The objective of this tool was to enable a comparison with the established landscape character units and to test the study hypothesis. The detailed results of this questionnaire have been presented in full in Section 6 and have also been incorporated and taken into account in the other documents of this landscape appraisal.

#### 5.2.- Development Mapping (Method Two)

A number of development options were prepared. These listed as:

- Modern Forestry
- Quarries
- Windfarms
- Powerlines
- Tourism Development

Groups of workshop participants were assigned a particular development option and asked to indicate on a map of the County, the area perceived as acceptable for such developments to take place.

The objective of this tool was to enable a comparison with the established landscape character units and to test the study hypothesis. The result of this method is presented in mapped and text forms in Section 7.

# 6.- Detailed Results of Questionnaire (Method One)

The questionnaire used as method one of value identification has been reprinted in Appendix 1 of this document. The results gained from the completed forms are reproduced here.

#### Question 1

List by preference the Landscape Character Areas, which are of value to you given your particular interest, (i.e. the special landscapes).

The preferred landscape areas have been illustrated on Map 1. These areas of special landscape interest have been identified as those areas of perceived naturalness and beauty e.g. Graiguenamanagh, Inistioge, Brandon Hill, Castlecomer Plateaux and the Nore, Barrow and Suir river valleys.

These areas perceived as special landscapes by workshop participants, correspond to the Landscape Character Areas identified in Document 1, i.e. the river valleys and the uplands. It can be concluded that the chosen areas conform to the landscape appraisal, as a correlation between physical landscape sensitivities and perceptions can be identified (see Section 7.1 for further detail).

#### <u>Question 2</u> *List the 4 landscapes which in your opinion are typical of the County, (i.e. the normal landscapes).*

The general public perception of the normal (or common) landscape areas reflects the agricultural character of the County. Thus the lowland areas (i.e. Kilkenny basin) were predominately indicated by workshop participants as being typical County landscapes. The Castlecomer Plateaux was also recognised as normal, due to the grassland cover on the flat terrain of the mountain tops and to the landscape reference provided by the rising topography.

Another area identified as a normal landscape was a linear strip of land between Ballyhale and Mullinavat in the South of the County. It is most likely that this undulating upland zone of the County is regarded as typical due to a frequency of trips along the national primary road that links Kilkenny and Waterford. The results have been illustrated on Map 2.

Generally, the areas perceived as normal landscapes by workshop participants, correspond to the Landscape Character Areas identified in Document 1, i.e. lowland areas and uplands. It can be concluded that the identified areas correlate to the landscape appraisal (see Section 7.3 for further detail).

#### Question 3

For each of the landscape character areas identified (Questions 1 & 3), answer the following questions:

- What degree of importance do they have?
- Is the area under threat in quantity or quality?
- Which area of the county is most sensitive in your opinion?

From this question the perceived sensitive landscapes have been mapped (see Map 3). From this illustration, it is possible to identify those areas of the County in which the landscape is considered to be of a sensitive type. The perceived most sensitive areas of the County include the environs of Kilkenny City, the towns of Callan, Graiguenamanagh and Inistioge, parts of the Nore and Barrow Valleys and the village of Goresbridge.

These sensitive areas conform to the Nore and Barrow valleys and the Brandon Hill Uplands identified within the Landscape Character Areas in Document 1. It can be noted that these areas perceived as sensitive and as being under threat, are also of high scenic amenity and landscape value and are currently under development pressure (see section 7.2).

#### Question 4

#### Where would you allow development?

This question is intended to generally determine the perceived landscapes, which are suitable for development. The results show that Kilkenny lowland areas (basin areas) and the uplands of the Slieveardagh Hills and Castlecomer Plateaux are considered most acceptable for development. The results have been illustrated on Map 4.

The upland areas were perceived as suitable for development along the enclosed valleys, due to the restricted views from the public realm. The robustness or the ability to absorb development presented by the valleys of these upland Character Areas identified in Document 1 correlates to the public perception. As a 'working landscape', the lowland areas are also perceived as suitable for general development, reflecting the existing landuses of this character area i.e. agricultural, residential and industrial development.

#### Question 5 – Pictorial Perception

6 photographs of typical County Kilkenny landscapes were shown to participants, who were asked to choose the most and least appreciated landscapes of the selection.

Picture 6 - (see below) was identified as most pleasing. The reasons for this choice ranged from aesthetical appreciation of the singular landscape features (i.e river and mountains) to the visually pleasing combination of a living landscape, i.e. the river valley and the dwellings with the mountains as a backdrop element.

Picture 1 - (see below) was identified as being the least appreciated landscape graphic. The reasons for this choice ranged from its dull appearance and colour, to visually not pleasing and to perceptions of poor, boggy, enclosed land.



Picture 1

Picture 6

#### Question 6

#### Where is your favourite drive in the County?

The south of the County is perceived as most scenic, with the preferred scenic drives from Kilkenny City, south-east towards Graiguenamanagh and New Ross; to the south-west from Callan to Piltown; and from Glenmore to Mooncoin to the south of the County. The scenic drive route most favoured by workshop participants, runs from Kilkenny City, to Thomastown and Inistoige to New Ross. The route from Inistoige to Graiguenamanagh was also highly perceived as scenic.

These results confirm the perceived visual amenity and recreational value of the south-east uplands, i.e. Brandon Hill, and the Nore valley.. The results of this question have been illustrated in Map 5. These areas of perceived scenic routes also correspond to the areas identified by workshop participants as of special/sensitive value (see Questions 1 and 3 of this section).

#### Question 7

#### Can you name three important landmarks that define the County?

The most common landscape landmark identified by workshop participants was Brandon Hill. The second highest identified landmark was that of the northern uplands (Slieveardagh and Castlecomer uplands). The choice of an upland area as a landmark landscape is not surprising, due to the visual dominance of upland areas, their tourism and recreational associations and Brandon Hill's location within the 'Leinster Way' walking route.

The third most popular landscape landmark identified by workshop participants were the river valleys of the County, i.e the 'three sisters'. These river valleys have been identified in Document 1 as important Landscape Character Units. The perception of the river valleys is that of characterising and shaping the County landscape as a whole.

In societal terms, those items or landscapes which are perceived as of a special value are identified as landmarks by a community. Therefore the choice of the upland areas and river valleys as County landmarks also correspond to the perceived special and sensitive landscape types as identified in Maps 1 and 3.

### 7.- Hypothesis Results

#### 7.1.- Special Landscape Areas (see Map 1)

Areas perceived as having special landscape value by the workshop participants are highly concentrated around the mountains and river valleys of the County. Brandon Hill area and its environs were favourably identified as special, including the towns of Inistoige and Graiguenamanagh. The area is perceived as picturesque and visually pleasing and considered to have high amenity value. The area is recognised in the County Development Plan, 2002 (Appendix F, Volume 1).

The river valleys of the Nore, Barrow and Suir were also highly indicated as special. The 'three sisters', as they are locally known, traverse the County and define its boundaries. A large percentage of the workshop participants maintained that the river valley landscapes are a characteristic feature of County Kilkenny (further confirmed by Section 6 – Question 7).

The upland Castlecomer Plateaux area was considered as having a special landscape value, as was the City of Kilkenny, due to its historic character and the visual amenity values encountered within the city limits. Other areas perceived as special landscapes include the south-west and the north-west uplands.

The perceived special landscapes correspond to those upland and river valley Character Units identified in Document 1. They further confirm the significance of the landscape features comprised within those units, i.e. the important landscape factors that give character to the relevant areas. Landscape features such as the shores of large rivers and the ridges or skylines or mountains, represent conspicuous features of the natural landscape to which the eye is drawn. These largely define and characterise physical landscape units (see Section 4 in Document 1 for further detail).

#### 7.2.- Sensitive Areas (see Map 3)

The Barrow River to the east of the County and Brandon Hill on the south-east uplands are most perceived as sensitive, which corresponds to the Barrow River Valley and the Brandon Hill Uplands identified in Section 4 of Document1. The most sensitive areas to development pressures (particularly as a result of tourism) identified were those areas of Inistoige and Graiguenamanagh. Kilkenny City environs were also identified as a sensitive landscape, however not to the degree in which Graiguenamanagh and Inistoige were described.

These areas can be correlated to the sensitivity of landscape features such as the river shores and the skyline defined by mountain tops. These are all conspicuous features of the natural landscape to which the eye is drawn because of strong contrasts of form and colour where there is contact between the land and sky or water. Therefore, they represent sensitive/ vulnerable features on the landscape as any development on or in the vicinity of shores or skylines has the potential to affect the visual integrity of the surrounding environment.

#### 7.3.- Areas where to Allow Development (see Map 4)

It is noteworthy to indicate the correlation between the areas perceived as sensitive and the areas considered suitable for development. The majority of workshop participants indicated the Slieveardagh Hills as being the most suitable area for development in the County, as settlement patterns are dispersed in the area and the landscape is perceived as having little scenic value (see Section 6 -Question 5). The undulating topography presented within this unit (see Section 4.1 of Document 1) also indicates an ability to absorb development.

It is noted that the general tendency was to allow development where it already exists, and therefore the environs of Kilkenny City, Castlecomer, Paulstown, Callan, Mullinavat, Kilmaganny and the Kilkenny/Waterford border were also perceived as appropriate for the establishment of future developments. These areas can support new development, as it is less likely to be conspicuous in the context of existing development in the landscape.

The development suitability of Kilkenny landscapes is further analysed in Section 8, which follows.

# 8.- Detailed Result of Development Mapping (Method Two)

The development suitability perceptions gathered at the workshop session have been compiled and mapped (see Map 6). These perceptions were based on certain types of developments as previously described in Section 5.2 of this document.

The results show that the areas considered acceptable for development to take place, generally correspond to the enclosed upland areas in the County. The Slieveardagh Hills were generally perceived as being most suitable, particularly the southern areas of this unit. The upland enclosures were largely identified as acceptable for infrastructure, wind energy, quarrying and forestry type projects.

The central valley of Castlecomer Plateaux, around Castlecomer town, and the upland enclosures were also perceived as suitable for general development. The area was found to be particularly appropriate for tourism development, but also for wind energy, quarrying, telecommunication masts and forestry.

Brandon Hill was perceived as highly sensitive and considered not suitable for any type of development except for tourism. The high scenic amenity value (as designated in the County Development Plan) and the tourism and recreational values provided by Brandon Hill and its environs, make the area highly vulnerable to any big developments that may impact on the character of the landscape.

The south-western and south-eastern uplands were considered to have development potential. General development was thought to be appropriate within the limits of already established urban areas, such as Kilmaganny and Mullinavat. The hilltops and upland areas were generally perceived as most suitable for forestry plantations and the undulating nature of these units was considered to have the capacity to absorb windfarm, powerlines and infrastructure developments.

In the lowland areas, the environs of Callan and Kilmaganny have been identified by workshop session participants as suitable for general development due to the already urban character of their environs. However, only powerline and infrastructure projects were considered suitable in the lowland areas of the Kilkenny Basin as part of this particular exercise.

Workshop session results also indicate that general development is perceived as suitable along the Waterford boundaries as well as within the urban environs of Piltown and Mooncoin in the South Kilkenny Lowlands. Tourism development was perceived as suitable to the west within this unit.

With regards to the river valleys, general development was perceived as acceptable in the Ballyragget environs of the Nore valley. The unit to the south of Kilkenny City was identified by participants as that suitable for quarrying, however the resources for this type of industry are not present in the area. The Graiguenamanagh area was also perceived by workshop participants as being suitable for tourism development, owning to its location on the Barrow River. This character unit was not considered suitable for any other developments.

An area of the Suir Valley between Mooncoin and Fiddown (Grange environs) was identified as an area of tourism development potential. In tandem, the Suir Valley was not identified as suitable for any other type development.

Transitional areas were not addressed at this exercise, although the location of certain types of developments such as powerlines fell within the boundaries of these units. In landscape terms,

transitional areas have an ability to absorb development, as the low –lying slopes, soil conditions and common scrubby shelter vegetation, provide the capacity to screen potential developments.

### 9.- Conclusion from Identification of Landscape Values

There is a general tendency to perceive the south (the south-east in particular) as highly special in landscape terms. The majority of the favourite scenic drive routes identified fall within this area. Brandon Hill and its environs, the Graiguenamanagh and Inistioge settlements are considered to be the most sensitive areas of the County.

The pasture and agricultural lands of the lowlands are generally described as normal or typical landscapes of County Kilkenny. The general observation of workshop participants was to allow general development in the north-west of the County.

It is worthwhile noting that the special and sensitive areas identified by the workshop participants fall within the boundaries identified for the Landscape Character Areas of the uplands and river valleys, which are considered sensitive/vulnerable in landscape terms. Similarly, the Slieveardagh Landscape Character Area was indicated as suitable for development, which corresponds with its poor quality agricultural lands and perceived lack of scenic value.

Therefore it is reasonable to state that the hypothesis presented in Section 4 has been proved as correct, in that the landscape character areas of Document 1 conform to those areas chosen by workshop participants as being of significance and value within the county.

# Appendix 1 – Questionnaire

# Kilkenny Landscape Evaluation Workshop - Questionnaire 19<sup>th</sup> March 2003.

Name:	
Organisation:	

- -

Interest in the Landscape: \_\_\_\_\_

- 1. List by <u>preference</u> the Landscape Character Areas, which are of value to you given your particular interest. (i.e. the special landscapes).
- 2. List the 4 <u>landscapes</u>, which in your opinion are <u>typical</u> of the County. (i.e. the normal landscapes).
- 3. For each of the <u>Landscape Character Areas</u> identified on the map, answer the following questions:
  - What degree of importance do they have?

Moderate High Low

• Is this area under threat in quantity or quality?

Yes No

- Which area of the county is most sensitive in your opinion?
- 4. Where would you allow development? Maximum 6 areas
- 5. Pictorial Perception (Which of the following landscapes would you appreciate more? What appreciate more- forest, pastureland, mountain top, river valley etc.)
   Use 5/6 representative photos

Most appreciated:	
Reason:	
Least Appreciated:	
Reason:	



- 6. Where is your favorite drive in the County?
- 7. Can you name three important landmarks that define the County?

(Note: should not be landmarks within the city: e.g. the castle) 14

Landmark	_
Reason:	_
Landmark:	
Reason:	_
Landmark	_
Reason:	_

Thank you for your time



# Appendix 2 – List of Appointed Consultees

# List of Consultees Invited to the Workshop\*

Teagasc

Heritage Council

- South East Regional Tourism Authority
- Kilkenny Tourism Council Ltd.
- An Taisce (Kilkenny Branch) Chairperson Dr Declan Murphy
- An Taisce National Branch.
- The Minister for the Arts Culture & the Gealteacht National Parks & Wildlife Service.
- Duchas The heritage service
- Department of the Environment & Local Government.
- Department of Agriculture.
- Coilte Teorenta Regional Office
- Irish Farmers Association
- Irish Creamery Milk Suppliers Association
- Macra na Ferme
- Keep Ireland Open
- Carlow County Council
- Laois County Council
- County Hall Portlaois
- Wexford County Council
- Waterford County Council
- Bord Failte Eireann
- An Chomhairle Ealaion (The Arts Council.)

Landscape Appraisal

of



# County Kilkenny

# **Document 3**

Prepared for Kilkenny County Council

By



CAAS Environmental Services Ltd. 6 Merrion Square Dublin 2 Ph. (01) 661 8136 / 662 1182 Fax. (01) 676 9502 E-Mail: caas@caas.ie

October 2003

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#### 1. Introduction

This document forms the final part of the Kilkenny County landscape appraisal. The appraisal has been sub-divided into three parts and subsequent documents. This document is preceded by the initial identification of character units: Document 1 - 'Landscape Evaluation' and the results of a workshop to test the emerging findings, Document 2 - 'Hypothesis Testing'.

Principally intended as a guide to the indicative landscape policies for the County, this document should be read in conjunction with the preceding documents listed above and the current County Development Plan.

#### 2. Landscape Issues

Document 1 of this landscape appraisal has examined the dynamism of the landscape and identified the various character units of County Kilkenny. Document 2 has examined the values attributed to, and the perception of the landscapes within the County. Combining the results of both documents, it is possible to determine the general landscape issues - such as sensitive and robust landscapes and major landscape features - which are of relevance to the landscape policy maker. Refer to the Document 1 an 2 for clarification on the general landscape issues.

#### 2.1 Existing General Spatial Issues

The purpose of this document is to provide the planning authority with a rational and transparent tool to supplement the development control process on a case-by-case basis in the determination of planning applications.

In order to achieve this purpose, a number of factors must be taken into consideration:

- County Designations scenic routes, views etc. (see County Development Plan Designations indicated on Map 12 of Document 1)
- Heightened public perceptions for these designations increased sensitivity and awareness related to high amenity areas.
- The type of development under consideration

The purpose of this landscape appraisal is to highlight those areas of physical landscape vulnerability and of potential conspicuousness, to aid the planning authority in the development control process to ensure that development may be accommodated in the areas most suitable (i.e. unlikely to be disproportionately conspicuous).

#### 2.2 Future General Spatial Issues

Landscape planning is no longer concerned with individual units of protected landscapes. Under the current legislation<sup>1</sup>, each local authority must prepare County landscape policies for incorporation into the County Development Plan.

This spatial planning process recognises that development *within* the landscape will continue, and encourages policies that take cognisance of the need for development and the identification of landscape units where such development may be comfortably accommodated.

This transparent process ensures that future landscape issues will be recognised and addressed in an objective, structured, methodological way - e.g. combining landscape resources to ensure that conservation and the expansion of towns and villages are sustainably balanced within the County.

<sup>&</sup>lt;sup>1</sup> Local Government Planning & Development Act 2000, Part II, S10 (e), 1<sup>st</sup> Schedule, Part IV (7).

Landscape planning can have a positive role in the spatial planning of a County through the protection of its landscape character, whilst permitting social, cultural and economic development – i.e. working and living landscapes.

#### 3. Landscape Policies

This section gives a brief overview of the current landscape policies within County Kilkenny. Further information is contained within Document 1 and cross-references are provided throughout this section. At present landscape policies are derived from the current County Development Plan. Such policies aim to protect the recognised features of the County landscapes as detailed below.

#### 3.1 Existing Relevant Policies

Protecting and preserving areas of perceived high amenity and those views and prospects within the County is an objective within the Development  $Plan^2$ . Policies arising from these objectives have been examined further in Document 1 – Section 2.1.10 (also see Tables 5 and 6 of same Document). These core policies list as follows:

#### Designated Areas of High Amenity

Such areas within the County are considered to have out-standing natural beauty and/or unique interest value. These areas have been listed in Table 5 – Areas of High Amenity (see Document 1 – Section 2.1.10). The following policies relate to such areas.

- A high standard of design and siting will be required for all development in such areas (see County Development Plan, Section 9.4.2).
- Development, which would be seriously injurious to the visual amenity of the area, will not be encouraged (see County Development Plan, Section 9.4.2).
- It is the policy of the Council to control all development within the Areas of High Amenity so as to exclude from them any development, which would be prejudicial to their natural beauty (see County Development Plan, Section 9.4.3).
- Where development is permitted within areas of high amenity a very high standard of siting design and landscaping will be required in order to ensure that the proposed development will be assimilated into the existing landscape (see County Development Plan, Section 9.4.3).

#### Views and Prospects

A number of views and prospects within the County have been identified within the Development Plan, for conservation and protection. These views have been listed in Table 6 – Protected Views (see Document 1 – Section 2.1.10). The following policies relate to the County views and prospects.

- Preserve, improve and open up places or areas from which views or prospects of high amenity can be enjoyed (see County Development Plan, Section 9.4.5).
- Remove and or alter walls, fences, hedges, or other obstructions and to control development so that views or prospects are not obstructed (see County Development Plan, Section 9.4.5).
- In conserving views, it is not proposed that this should give rise to the prohibition of development along these routes but development, where permitted, should not seriously hinder or obstruct these views and should be designed and located to minimize their impact (see County Development Plan, Section 9.4.5).

<sup>&</sup>lt;sup>2</sup> Kilkenny County Development Plan, 2002, Volume 1, Chapter 9, 'Conservation and Preservation', Section 9.4 – Landscape

Further areas of County Kilkenny have been designated as Natural Heritage Areas (NHA's) and Special Areas of Conservation (SAC's). These designations, which are formed at the local and national government levels, as well as at European level, apply landscape policies of protection and conservation. Further details of these designated areas are located in Document 1 -Section 2.1.10 and Map 12.

#### **3.2** Future Policies Requirement

The draft guidelines for landscape assessment<sup>3</sup> provide a basis for future landscape policies by stating:

'Landscapes are not meant to be fossilised; they must however be respected. What is now necessary is that we have an evenness of approach and method...'

An even approach and method of analysis has been followed during the preparation of this landscape evaluation. The methods used reflect those of the current guidelines (see Document 1, Section 1).

The most prevalent future requirement for landscape policies is the enactment of the Local Government (Planning and Development) Act, 2000. Specifically, Part II, S10, (e) and the 1<sup>st</sup> Schedule, Part IV, (7) requires that every planning authority in making a development plan, must include objectives for the:

'Preservation of the character of the landscape...including the preservation of views and prospects and the amenities of places and features of natural beauty or interest.'

This statutory tool ensures that all counties will fully consider landscape sensitivities within their functional area at the development control stage of planning, on a case-by-case basis.

#### 3.3 Landscape Policy Map

Based on field observation and mapping as detailed in Document 1, four categories of landscape units were identified specifically for County Kilkenny – i.e. the identified landscape character areas with similar physical and visual characteristics were combined to define the major landscape areas in the County -. These categories list as:

- 1. Upland Areas
- 2. Lowland Plains
- 3. River Valleys
- 4. Transition Zones

These landscape policy areas are illustrated in Map 1 and form the basis for the formulation of landscape protection policies as further described in Sections 5 and 6 of this Document.

#### 3.4 Landscape Sensitivities

Policy responses for the identified degrees of landscape sensitivity (see Map 2 and also Section 5 in Document 1) have been formulated, taking into account the described landscape character factors and values as identified in Documents 1 and 2 respectively.

<sup>&</sup>lt;sup>3</sup> 'Landscape and Landscape Assessment, Guidelines for Planning Authorities', (DRAFT) DOE, June 2000.

Robust landscapes are also taken into consideration. Such areas have more capacity to absorb development, due either to the inherent physical landscape factors in the area or to the already existing urban character. These areas have been illustrated in Map 3.

The combination of sensitive and robust landscape features (Map 4) show the areas with low potential to absorb new development (i.e. vulnerable and sensitive areas) and areas with high potential to absorb new development (i.e. robust areas). Nevertheless, proposed developments in those areas (particularly in sensitive areas) shall always be subject to a site-by-site assessment.

The principles of sustainable development are incorporated into the early stages of the policy formulation process to ensure that the landscapes of the County will be preserved and protected whilst allowing for development to take place (e.g. encourage development in robust areas and prohibit/limit development in areas classed as vulnerable/sensitive). Policies, which reflect these landscape sensitivities, are further outlined in Section 6 of this document.

### 4. Landscape Policy Objectives

The policy objectives contained within this document are the protection of the character of the landscapes of the County, the recognition of the economic value of the working landscape and the need to accommodate development therein.

#### 4.1 Landscape Outcomes

The most desirable landscape outcome is that the value of the landscape is taken into account during the formulation of policy and during the development control process. These values have been identified in the preceding documents as those of aesthetic, environmental, cultural and economic variables (see Document 1 Section 2.1 and Document 2 for details). Therefore the most desirable landscape outcome would be to achieve the protection of the integrity of the occupied landscape while ensuring that future development can be accommodated; in other words, to ensure a dynamic, inhabited landscape while maintaining the distinctive appearance and character of its component parts.

#### 5. Principle Policy Areas

The main landscape policy areas identified for County Kilkenny are as follows (see also Section 3.3. above):

- Upland Areas
- Lowland Plains
- River Valleys
- Transition Zones

These landscape policy areas are illustrated in Map 1.

The principal Landscape Character Areas have been examined in detail throughout Document 1 and illustrated on Map 11 of that document. It must be noted that boundaries of character areas identified on this map are not definitive, but *indicative*. This map has been used to identify and define landscape protection policy areas. These will be used to formulate landscape policies, which will help to ensure that future developments do not disproportionally alter the landscape character of the identified units. The results of the workshop session have also been considered in the compilation of landscape policies. These results have been detailed in Document 2 of this landscape appraisal.

A set of indicative policies relating to the landscape attributes, robustness, and sensitivities of each of the four categories will provide the framework for landscape policies, to be included into the Kilkenny County Development Plan. This will result in the consideration of landscape factors on a case-by-case basis during the development control stage of planning.

The indicative policies below should <u>always</u> be read in conjunction with the critical landscape factors of each character unit, as detailed in Document 1.

#### Case Study - Disproportionate Visual Impact

It is not always possible to avoid visual impacts. Some developments will be unavoidably visible or even conspicuous, owing to their size (e.g. electricity supply pylons), location (e.g. water reservoir) or function (e.g. wind turbines). These intrinsic functional locational requirements are not to be confused with variable locational requirements that arise from ownership or preference. Site selection and design can significantly reduce (but not avoid) the visual impact. The resultant 'residual impact' is the environmental 'cost' of the development.

Development control decisions concerning the acceptability of residual impacts must have regard to the balance between the cost of the environment and the benefit to society. Ideally a small or moderate environmental cost should produce a large benefit to society (see case A below). Where a large environmental cost produces little or not benefit to society (see case B) then the impact is disproportionate to the benefit.

#### Case A

A water reservoir for the County

#### **Considerations**

• The location and elevation is intrinsic to the function – i.e. the height necessary to produce hydraulic head and the water supply source from an upland stream is necessary

- The proposed development will be conspicuous over a wide area
- The benefit (improved water supply) will accrue to people over a wide area

#### Determination

The permission should be granted because the visual impacts will principally affect those people who are directly benefiting from the development. Conditions can help to reduce the visibility by choice of colour, planting and screen mounds.

#### Case B

A house

#### **Considerations**

• A wide range of sites available elsewhere and there is no functional necessity to build on this particular site

- The proposed development will be conspicuous over a wide area
- The benefits (e.g. panoramic vistas) will accrue only to the occupants

#### Determination

The permission should be refused because the visual impact will affect large numbers of people who will not benefit from the development. The residual impacts on the community, following the imposition of conditions, would remain disproportionally high.

#### 6. Indicative Landscape Policies

The general characteristics of these areas are summarised below. The following policies are intended as indicative landscape policies for the County of Kilkenny. All policies should be read in <u>conjunction with</u> the policies included in the current County Development Plan. Policy examples are given throughout the text.

#### 6.1 The Upland Areas

These distinctive areas of the County form a single large policy unit due to the similar visual characteristics. These include undulating topography, areas of low-growing vegetation, steep slopes and prominent ridgelines.

These areas are conspicuous when seen from lowland areas. However, these character units also have areas of 'internal' visual robustness (due to high degree of enclosures) despite 'external' visual vulnerability - due to elevation, ridgelines and steep slopes. Therefore, within the upland areas mixed robustness/vulnerability zones can be found, depending on configuration and topography.

Refer to Map 1 for extent of upland areas.

#### Example **Policy 3**:

Where new buildings are required on steep slopes, the design should be specifically adapted. Minimising the need for cut and fill can greatly reduce the visual prominence.

#### Example Policy 5:

Areas of existing development – such as forestry – should be on the first preference when sitting new development in mountainous upland moors and heathlands. This minimizes the need for new access, fencing or other works that can reduce the extent of undisturbed natural vegetation.

#### Policy 1

Ensure that development will not disrupt disproportionately the integrity of distinctive primary ridgelines when viewed from relevant scenic routes and settlements.

#### Policy 2

Ensure that development will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, as identified in the Development Plan, when viewed from areas nearby scenic routes or settlements.

#### Policy 3

Ensure that developments on steep slopes (i.e. >10%) will not be conspicuous or have a disproportionate or dominating visual impact on the surrounding environment as seen from relevant scenic routes and settlements.

#### Policy 4

Facilitate developments that have a functional and locational natural resource requirement to be situated on steep or elevated sites (e.g. reservoir or wind energy structures) with reference to the appropriate County strategies currently in place, which ensure that any residual adverse visual impacts are minimised or mitigated (see case study).

#### Policy 5

Maintain the visual integrity of areas, which have retained a dominantly undisturbed upland character.

#### Policy 6

Have particular regards to any sensitive upland areas as identified in Map 2.

#### Policy 7

Facilitate appropriate development in an incremental and clustered manner, where feasible, that reflects the scale, character and sensitivities of the local landscape.

#### Policy 8

The difficulty of establishing and maintaining screening vegetation shall be a material consideration when evaluating proposals for development within sensitive areas of the uplands (Map2).

#### 6.2 The Lowlands

The lowland plains of County Kilkenny principally comprise fertile lands with relatively high levels of local population and intensive land management. The slope and topography of such units occurs in a shallow/gradual transition; the area is generally characterised by flowing terrain and low vegetation. Concentrations of tillage lands in this lowland area tend to be characterised by extensive views across large fields with low and highly maintained hedges.

Refer to Map 1.

Example Policy 11:

Large new agricultural storage structures – for example – should be sited beside existing structures to form a distinct and unified feature in the landscape.

#### Policy 9

Recognise that the lowlands are made up of a variety of working landscapes, that are critical resources for sustaining the economic and social well-being of the County.

Policy 10

Recognise that this policy area contains the majority of the County's population. These also incorporate most of the major national primary and regional roads.

#### Policy 11

Continue to permit development that can utilise existing infrastructure, whilst taking account of local absorption opportunities provided by the landscape and prevailing vegetation.

#### Policy 12

Continue to facilitate appropriate development in a manner that respects the scale, character and sensitivities of the landscape, recognising the need for sustainable settlement pattern and economic activity within the County.

#### 6.3 The River Valleys

River valley areas represent potentially vulnerable linear landscape features, as they are often highly distinctive in the context of the general landscape. However, landscape sensitivities are often very localized or site-specific within this unit. The river valley landscape is composed by 3 main areas:-

- Floodplain slopes. Such slopes are often steep areas of mature vegetation.
- Floodplains levels. Such areas tend to be characterized by smooth terrain, mixed land uses and open views.
- Riverbanks. Vegetation generally occurs along the riverbanks, often consisting of mature trees and extensive areas of natural vegetation

Refer to Map 1.

#### Policy 13

Direct new development whenever possible towards the vicinity of existing structures and mature vegetation.

Example Policy 16:

#### Policy 14

Ensure that development will not detract from scenic vistas, especially from bridges, as identified in the development plan, and visible from relevant scenic routes and settlements.

#### Policy 15

Continue to permit development that can utilise existing structures, settlement areas and infrastructure, whilst taking account of the visual absorption opportunities provided by existing topography and vegetation.

#### Policy 16

Control development that will adversely affect distinctive linear sections of river valleys, especially open floodplains, when viewed from relevant scenic routes and settlements.

Apply Policy 7 under 'The Upland Area' as appropriate (see also below).

#### Policy 7

Facilitate appropriate development in an incremental and clustered manner, where feasible, that reflects the scale, character and sensitivities of the local landscape.

Where development in the floodplain is unavoidable, it is extremely important to consider the visual cumulative impact both of flood protection measures as well as the proposed development.

#### 6.4 Transitional Areas

Transitional areas contain some of the elements of both the upland and lowland areas. This character unit is highly variable over short distances but is generally characterised by poorer drainage, higher water table, lower fertility and/or limited landuse potential, vigorous hedges, many hedgerow trees and lower levels of land management.

Transitional areas may also contain large fields with low hedges and scattered trees. The land is mostly used for stock rearing or some mixed tillage. Blocks of coniferous forestry (both old and new), some new deciduous forestry and some successional woodland on steep also occur within this character unit.

Refer to Map 1.

Apply policies 5 and 7 under 'The Upland Area' as appropriate (see also below).

*Example Policies* 9&10:

The screen planting for quarry rehabilitation should comprise successional woodland species on the steep spoil slopes to mimic similar natural occurrences within the area.

#### Policy 5

Maintain the visual integrity of areas, which have retained a dominantly undisturbed upland character.

Policy 7

Facilitate appropriate development in an incremental and clustered manner, where feasible, that reflects the scale, character and sensitivities of the local landscape.

Apply policies 9 and 11 under '*The Lowland Area*' as appropriate (see also below).

#### Policy 9

Recognise that the lowlands are made up of a variety of working landscapes, that are critical resources for sustaining the economic and social well-being of the County.

#### Policy 11

Continue to permit development that can utilise existing infrastructure, whilst taking account of local absorption opportunities provided by the landscape and prevailing vegetation.

## 7. Applications and use of Landscape Mapping and Policies

#### 7.1 Limitations and Applications

The following guidance notes are indicative of the applicability of the Landscape Protection Policies. It must be noted that the policies presented above are indicative and for use in the guidance of design development control decision.

A - It is recommended that 'Implementation and Application Guidelines for Development Control' be adopted to augment the use of the Policy Areas Map.

#### Reason

To ensure consistency and clarity in the application of landscape policy.

B - It is recommended that all copies of landscape Protection Policy Area Mapping, should include notification of applicability and accuracy. The following should be included in every Landscape Character Areas and Landscape Protection Maps: '*This map is for indicative purposes only*'.

#### Reason

To provide clarity and guidance in the use of these policy documents.

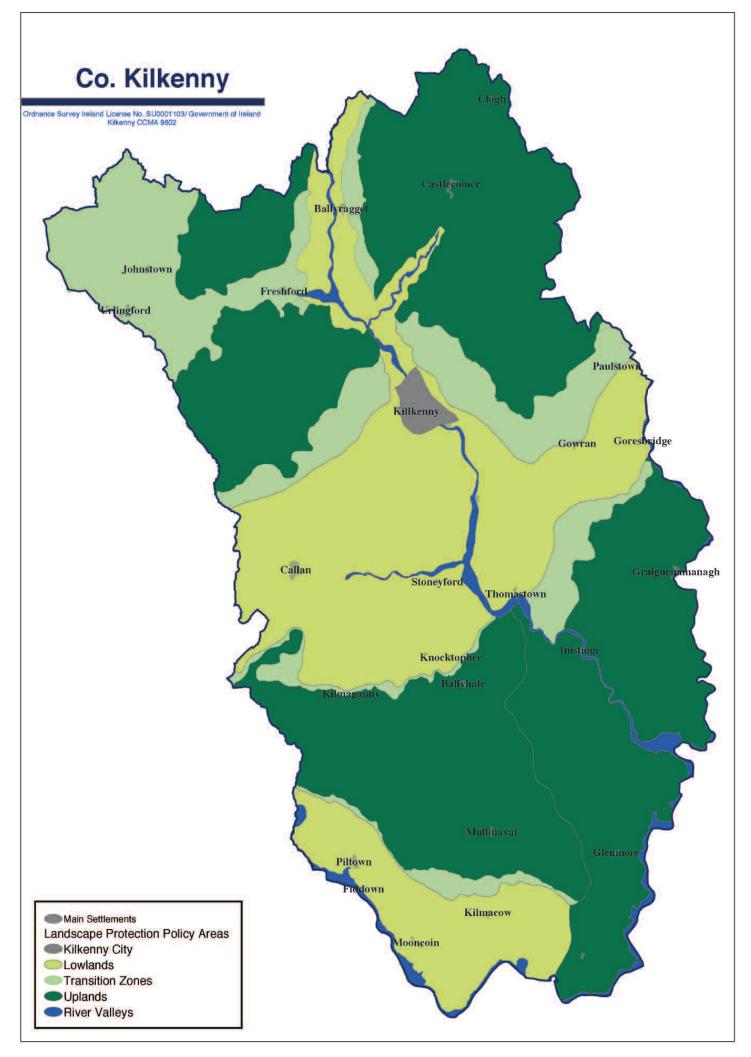
C - It is recommended that Landscape Protection Policy Maps should only be made available at a scale of 1:200,000 or less.

#### Reason

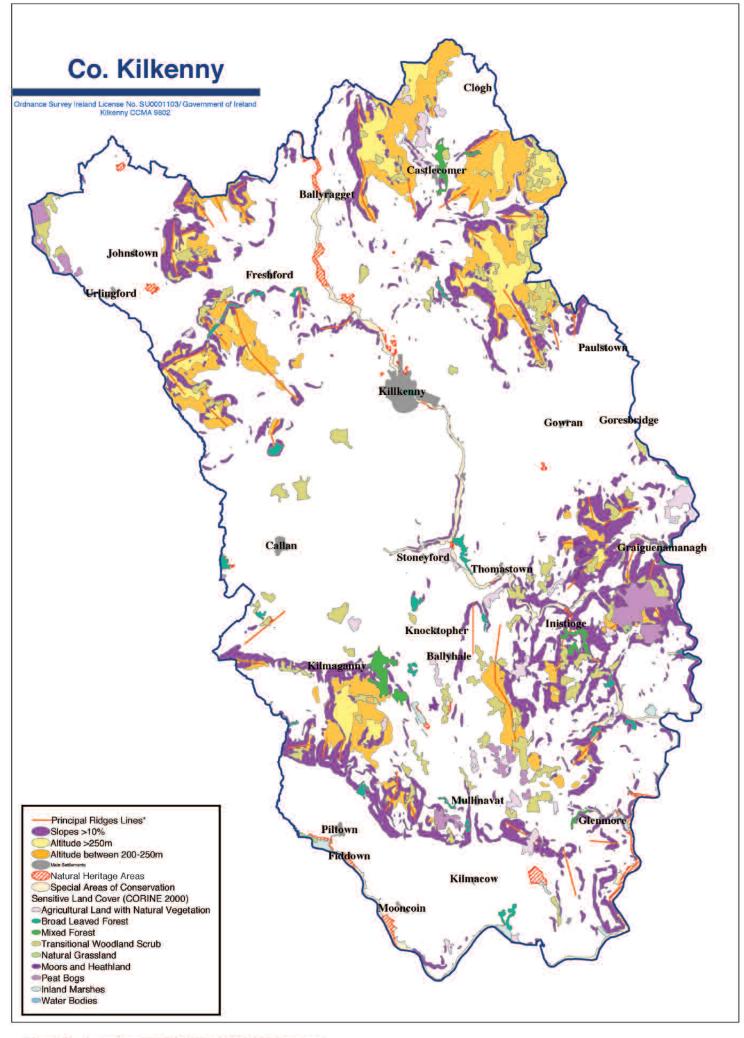
To facilitate site-by-site evaluation of individual applications while maintaining suitable levels of confidence and clarity.

#### 7.2 Application to Development Control

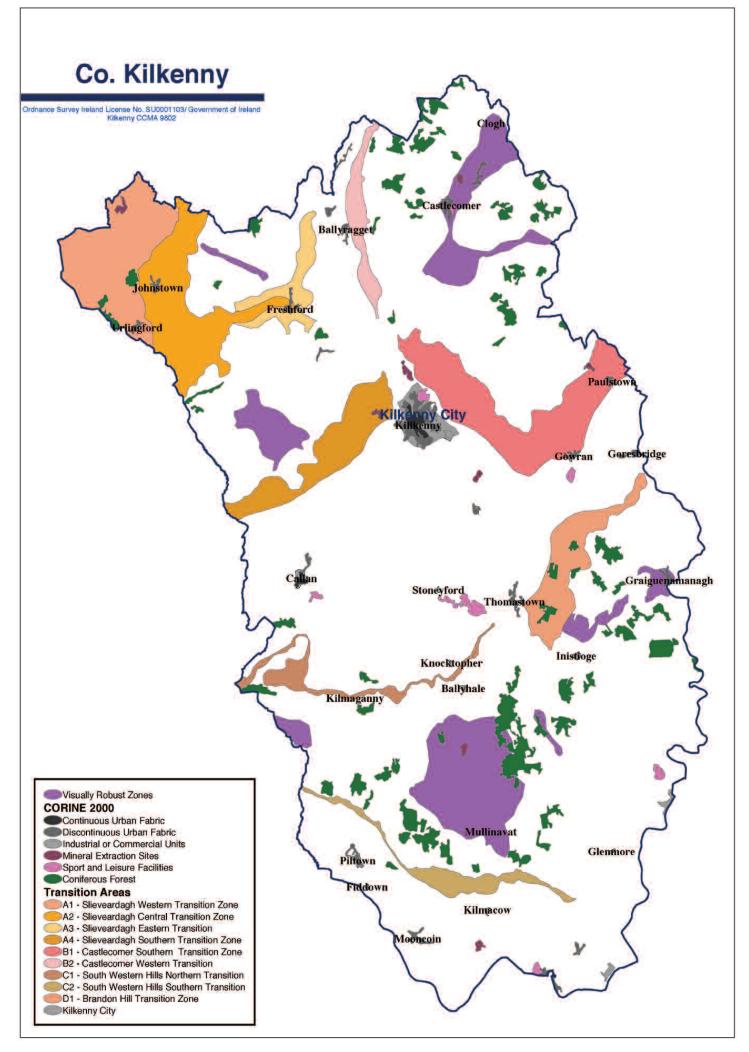
The existence of spatially specific large-scale policy maps creates an expectation of 'zoning' - analogous to those used in Development Plans for urban areas - which provide definitive boundaries for the extent of policy application and is therefore not recommended (see Section 7.1. above).



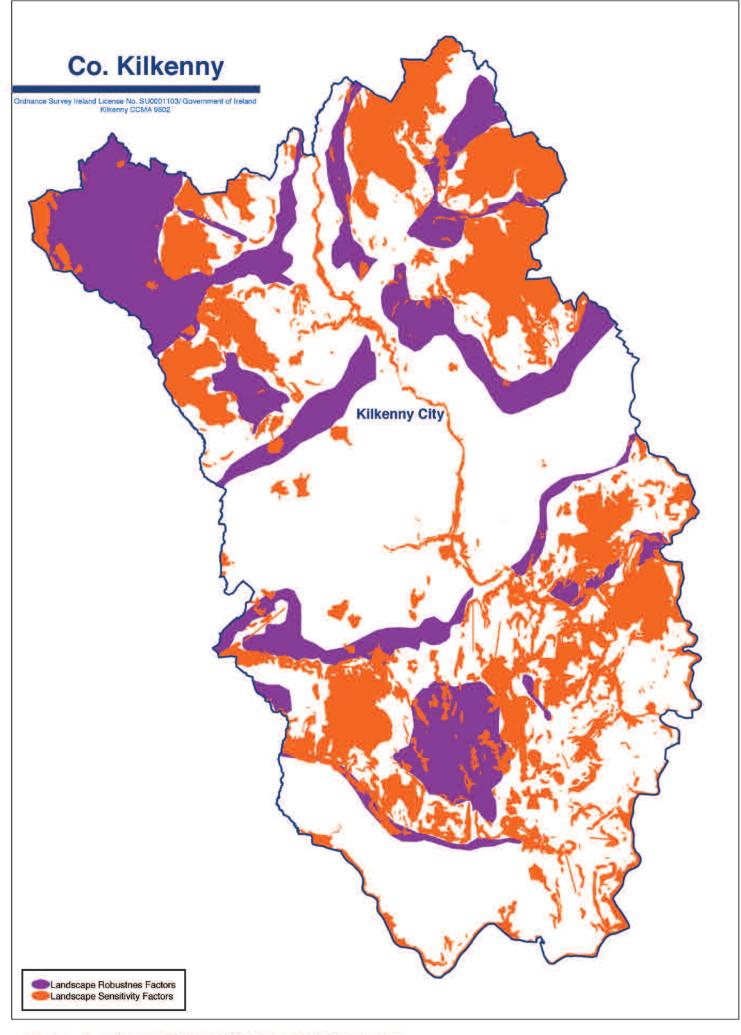
Map 1.- Landscape Protection Policy Areas



Map 2.- Landscape Sensitivity Factors \* As supplied by Kilkenny County Council



Map 3.- Landscape Robustness Factors



Map 4.- Landscape Sensitivities and Robustness