Chapter 18 Landscape Character Areas







# 18 Landscape Character Areas

#### 18.1 Background

#### 18.1.1 The Landscapes of the County

The varied landscapes in County Kildare are very much a product of their past. This landscape has been moulded by the first agriculturalists of the late Stone Age (about 6,000 years ago) and continues to do so today. In order to evaluate the present landscapes, it is necessary to examine their formation and origins.

#### 18.1.2 Shaping the Landscape: Natural Origins and Human Influence

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

The Mesolithic Period, approximately 9,000 years ago, 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 then, with the Neolithic Period (4000 BC). The first farmers introduced mass forest clearance (pines and elms) and the establishment of tillage and pastureland.

In the Bronze Age settlement expanded in lowland areas. During the Iron Age, climate deterioration 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 another 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. Ringforts enclosing single farmsteads and irregular crop fields were predominant man-made landscape features. Many of the Ecclesiastical settlements of this era developed into large monasteries (e.g. Kells Abbey) - with resultant woodland clearance - and some became proto-urban centres involved in

specialist industries. These prestigious monasteries performed the functions of incipient towns, as early central places with cult, market and political functions. Towns like Kildare and Monasterevin were significant centres with a broad territorial reach. These proto-urban areas developed, many into the existing large urban centres of Ireland.

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. At the beginning of the 14th century, territories under English control were protected by a series of linear earthworks known as pale, fragments of which can still be traced in Co. Kildare. As arable farming increased, the landscape reflected the commercial importance of farming with new field pattern systems, reflected in the states, demesnes and enclosures found throughout the County.

#### 18.1.3 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. The sites and monuments distribution shows the spread of historic settlement (see map 17.3). This historic pattern of settlement influences the cultural landscape features of the County. The increasing population, the flourishing rural economy and the establishment of settlement clusters throughout history marked the evolution of County Kildare's cultural landscape. Although during the Christian era, most of the large monasteries and village clusters were established, consequent successive invasions (e.g. Vikings and Normans) further modified the landscape. Thus, although some of the earliest towns in Ireland were formed around the greater monasteries in late pre-Viking times, the process of monastic urbanisation was boosted by Viking settlements from 800 AD onwards. Streets and suburbs were consolidated around the monastery of Kildare approximately in the 11th century.

The plantation towns and estate systems also physically and culturally affected the landscape of the County as a whole. Even

today, the field patterns throughout the County reflect large estate land holdings originated in the Viking and Norman times.

County Kildare is located on the south-western edge of Dublin and consequently is experiencing considerable population growth and development levels. These factors will further shape the landscapes of the County, which are nevertheless continuously evolving.

#### 18.1.4 The Landscape Today

Kildare is an inland county situated in the east-central part of Ireland. It occupies an area of 418,645 acres (169,426 hectares), which consist of a fertile plain with upland areas mainly on the eastern County boundary. The County has been settled for the past 6,000 years, Kildare town being a monastic place before the year 800AD and consolidating into a town core by the 12th century.

The river and canal networks are important landscape features within the County. The River Barrow and the River Liffey form the river valleys, which are main aspects of the County landscapes as a whole and present major water catchment areas. The River Liffey runs through the eastern part of the County, reaching as far as Newbridge and running into the Poulaphuca Reservoir at Ballymore Eustace, characterising the north-eastern share of the County. The River Barrow, together with the Black River and the Slate River typify the western County boundary. The Rye Water River – a tributary of the River Liffey - runs along the northern County boundary.

Similarly, the Grand Canal and the Royal Canal are also significant landscape features in the landscapes of the County. The Grand Canal, which runs from Newbridge to Dublin, forms a significant landscape feature of the eastern part of County Kildare. The Royal Canal adds to the character of the northern part of the County, running from Leixlip to Moyvalley.

The confluence of the River Liffey into Poulaphuca Reservoir and the undulating landform of the hilltops in the area, together with the Wicklow Mountains which form the background skyline to the east of County Kildare, provide one of the County's most spectacular landscape areas.

A very different significant landscape area of County Kildare is the Curragh, which represents the largest unenclosed area of arable land of the country (5,000 acres). The gently undulating lands of the Curragh contain the army training centre and the headquarters of the Irish horse racing, and also a number of prehistoric earthworks.

The topography of the County consists of a large fertile plain broken only by a few small hills such as Dunmurry Hill and the Hill of Allen, with more steeply rolling uplands to the east. There are no remarkable topographical changes in the County although there are relatively significant physiographic features contrasting with the generally flat nature of the County, such as Slieveroe to the northeast, Corballis Hills to the south-east, Allen Hill, Dunmurry Hill, Grange Hill and Red Hill on the central lands to the west and Newtown Hills to the north.

The surface of Kildare is a result of glacial deposition. It is underlain by Silurian sedimentary rocks and Carboniferous limestones that only occasionally reach the surface and thus have no dramatic effect on the landscape. However, the mountainous terrain of the eastern boundary of County Kildare - where slate, shales and greywackes of the Cambrian period determine the underlying geology - owes its sculpted form to glacial erosion. Similarly, the line of low hills, which includes the Chair of Kildare, marks an inlier of more resistant Lower Paleozoic slates and volcanic rocks.

In general terms, the topographical features (i.e. the eastern and west-central upland areas) together with the River Liffey confluence to the east and the River Barrow valley to the west, provide high amenity areas due to their landscape characteristics and distinctiveness and the visual amenity value.

#### 18.2 Landscape Character Areas

The Local Government (Planning and Development) Act, 2000. Specifically, Part II, S10, (e) and the 1st 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 landscape sensitivities within the county shall be given due consideration at the development control stage of planning, on a case-by-case basis. In order to fulfil its statutory objective Kildare County Council has carried out a Landscape Character Assessment.

This section identifies significant character areas within the County (see Map 18.1).

This chapter sets out the following information for each landscape character area:

Policy Statements: the Council's policies in relation to the preservation of the landscape character areas.

Description: briefly identifies each unit and its characteristics.

Land Uses: identifies prevalent land uses.

Boundary Determinants: establishes how the landscape unit can be identified.

Critical Landscape Factors: detail of the terrain, vegetation, topography etc.

Table 18.1 Landscape Character Areas, see map 18.1

		Landscape Units
18.3 Upland Areas	1 2 3 4	Eastern Uplands - Oughterard South-eastern Uplands - Corballis Hills Northern Hills - Newtown Hills Chair of Kildare - Red Hill Dunmurry Hill, Allen Hill
18.4 Lowland Areas	1 2 3 4 5	Northern Lowlands – Naas and environs Southern Lowlands North-western Lowlands – Cadamstown and environs Central Undulating Lowlands Western Boglands
18.5 Transition Areas	1	Eastern Transition Lands
18.6 River Valleys & Water Corridors	2 3 4 5	River Liffey River Barrow Grand Canal Royal Canal
18.7 Other Landscape Units	1 2 3	The Curragh Pollardstown Fen Allen Remnant Bogs

# Upland areas

## 18.3 Upland Areas

#### **POLICY STATEMENT**

These areas are conspicuous when seen from lowland areas. These character units however also have areas of 'internal' visual robustness (due to 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, land cover and topography.

#### There are four Upland Areas:

- 1. Eastern Uplands
- 2. South Eastern Uplands
- 3. Northern Hills
- 4. Chair of Kildare

See the following pages for a detailed profile of each character area.

It is the policy of the Council:

UA 1 To ensure that development will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not

significantly interfere or which detract from scenic upland vistas, as identified in the chapter 21, when viewed from areas nearby scenic routes, viewpoints or settlements.

- UA 2 To ensure that developments on steep slopes (i.e. >10%) will not be conspicuous or have a disproportionate visual impact on the surrounding environment as seen from relevant scenic routes, viewpoints and settlements.
- UA 3 To facilitate developments that have a functional and locational natural resource requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunication masts 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.
- UA 4 To maintain the visual integrity of areas, which have retained a dominantly undisturbed upland character.
- UA 5 To have regard to the potential for screening vegetation when evaluating proposals for development within the uplands.



# 18.3.1 Eastern Uplands - Oughterard

#### Description

The Eastern Uplands are located in the northeast of the County and extend into the neighbouring County of Wicklow, as they are part of the Wicklow Mountain complex. The undulating hills situated within County Kildare lie to the east of the Liffey. The topography rises from the lowland plains, through undulating terrain to the highest points of 379m above sea level (Ordnance Datum) at Cupidstownhill east of Kilteel and 349m A.S.L. at Caureen east of Rathmore; further south the maximum elevation being 332.25m O.D. at Slieveroe, east of the village of Morganstown and west of Blessington.

The elevated nature of this area, provides a defined skyline with scenic views over the central plains of Kildare and the neighbouring Wicklow mountains which further define the skyline and the extent of visibility.

Soils in the area are dominated by Grey Brown Podzolics combined with Brown Earths and mineral soils (see map 18.2). The hilltops (mainly Brown Earths) are poorly suitable for tillage and pasture and moderately suitable for forestry, and the rest of the lands have good suitability for the mentioned agricultural and forestry practices.

#### Land Uses

The Eastern Kildare Uplands are rural in context with a number of scenic views from elevated vantage points. The general landuse on the uplands is pasture, however some areas are occupied by arable lands, such as tillage, and conifer plantations. Mineral extraction sites are also of significance, particularly east of Caureen hill as a result of the natural resource allocation (sand pits and slate quarries). Land parcels are of medium to large size, with a proliferation of gorse on unmanaged lands. Hedgerows are generally low and well-maintained, with scattered hedge trees at some sections.

Small villages, together with a dispersed pattern of farm structures are indicative of a relatively low rural population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the topography and geology and of the area, which largely coincide

with the subsoil (i.e. quaternary geology) and soils, and are further confirmed by the landform and the existing land uses.

#### Critical Landscape Factors

#### Elevated Vistas

The R410 secondary road and number of local, third class roads give access to the uplands. Local roads cross the upper and lower slopes of the hills. As a result of the elevated road level and the generally low vegetation, there are long distance views towards the Kildare lowlands and the Chair of Kildare.

#### Slopes

Steep slopes often define the visual boundary of lowland areas. Sloping land often provides an area with its character and intensifies the visual prominence of any feature over greater distances, as in the case of the Eastern Uplands. Slope also provides an increased potential for development to penetrate primary and secondary ridgelines when viewed from lower areas of the public realm such as the roads and population centres (e.g. Rathmore, Eadestown, Kilteel) in this area.

#### • Prominent Ridgelines

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 Eastern Kildare Uplands, nearly all ridgelines are secondary when viewed from the lowland areas, as the Wicklow Mountains to the east define the skyline (i.e. form primary ridgelines).

Ridgelines perform the important roles of providing adjacent areas with visual identity, acting as dominant landscape focal points, and defining or enclosing the extent of visual catchments.

#### Undulating topography

Gently undulating topography occurs within the upland area of this character unit. The physical shielding of a built form within the lee of hills provides areas that are visually unobtrusive in the landscape. Furthermore, the dynamic and complex nature of undulating land encloses smaller vistas and helps to provide a more intimate scale and visual containment not available in other open lands.

#### Low Vegetation

Low vegetation occurring in this unit as grassland, moorland and generally low hedgerows, is generally uniform in appearance, failing to break up vistas and allowing long distance visibility. These areas therefore exhibit an inability to visually absorb development.

#### Shelter Vegetation

Shelter vegetation, represented in certain locations of this unit by coniferous plantations and other woodlands, provides visual screening and helps to provide a visual containment not available in open, low-vegetation lands.

#### Localised River Views

River valleys are generally visually enclosed and highly localised areas of very distinctive character with a high degree of visual consistency. Due to the elevated nature of this landscape character unit, views of the River Liffey valley as well as of the Pollaphuca Reservoir are available from the hilltops and high points at some of the local roads.



Undulating topography and defined skyline on the Eastern Uplands.



Extensive and long-distance views to the Kildare plains to the west (above) and to the neighbouring Wicklow Mountains to the east (below).



# 18.3.2 South Eastern Uplands - Corballis Hills

#### Description

The South-eastern Uplands coincide with Corballis and Hughstown Hills to the south-east of the County, east of Castledermot. This upland area also extends into the neighbouring Wicklow mountains, as they are part of the same geomorphological complex. The topography gently rises from the southern lowlands, through undulating terrain to the highest point of 298m O.D. at Hughstown Hill. Another significant landmark in the area is provided by the coniferous hilltop of Corballis Hill, at 258m O.D.

The relatively elevated nature of this area provides a locally defined skyline to the east with scenic views over the southern plains of Kildare as well as to the neighbouring Wicklow Mountains, which further define the skyline and the extent of visibility.

Soils in the area are dominated by Grey Brown Podzolics combined with Brown Earths and mineral soils. The lands have generally good suitability for tillage, pasture and forestry, however the hilltops are poorly suitable for such practices.

#### Land Use

The South-eastern Uplands are rural in context, the general landuse being pasture. Significant areas however are occupied by arable lands, mainly tillage, and conifer plantations. Natural vegetation also occurs at certain parts of Hughstown Hill. Land parcels are of medium size, with generally unmaintained and thus tall hedgerows that screen potentially scenic vistas along the local roads.

A relatively high density of rural housing, together with a dispersed pattern of farm structures are indicative of a growing rural population density.

#### **Boundary Determinants**

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

#### Critical Landscape Factors

#### Elevated Vistas

A number of local roads cross these upland areas. The local roads run through the upper and lower slopes of the hills and provide access to residences within the uplands. As a result of the elevated road level and the lack of tall vegetation, there are long distance vistas towards the Southern Kildare Lowlands. However, these views are affected by the generally unmaintained hedgerows and tall vegetation (i.e. existing conifer plantations).

#### Slopes

Slopes often define the visual boundary of lowland areas. Sloping land often provides an area with its character and offers an increased elevation, intensifying the visual prominence of any feature over greater distances, as in the case of the Corballis Hills. Slope also provides an increased potential 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 Ridgelines

In this upland environment of the Hughstown and Corballis Hills, all ridgelines are secondary when viewed from the lowland areas, i.e. the hilltops are visible from some prospects below the distant primary ridgeline formed by the Wicklow Mountains to the east.

Ridgelines perform the important roles of providing adjacent areas with visual identity, acting as dominant landscape focal points and defining the extent of visual catchments.

#### Undulating topography

Gently undulating topography is presented within the Corballis upland character unit. The physical shielding within the lee of hills can conceal relatively large new features (e.g. between Hughstown and Corballis Hills) rendering them visually unobtrusive. Furthermore, the dynamic and complex nature of undulating land encloses local vistas and helps to provide a realistic scale and visual containment not available in open lands.

#### Low Vegetation

Low vegetation, represented at some areas of this unit by grassland and moorland, is generally uniform in appearance, failing to break up vistas and allowing long distance visibility, thereby, providing an inability to absorb development.

#### • Shelter Vegetation

Shelter vegetation, largely represented in this unit by coniferous plantations and generally unmaintained and tall hedgerows, provides visual screening, enclosing vistas and helping to provide a visual containment not available in open, low-vegetation lands.



Sloping land & ridgeline of Hughstown Hill. Pasturelands contrast with the naturally occurring shelter vegetation.

#### 18.3.3 Northern Hills - Newtown Hills

#### Description

This character area is a small upland area on the central-northern part of the County boundary, which includes the hills to the north and south of Newtown (with 145m O.D. and 135m O.D. respectively) that locally define the skyline in this area. This unit lies immediately south of the Royal Canal.

The relatively elevated nature of the local roads in this area, which run through both hilltops, provides scenic views over the northern and north-western plains of Kildare as well as to the Royal Canal corridor at certain vantage points and to the neighbouring County Meath undulating lowlands.

Soils in the area are dominated by Grey Brown Podzolics combined with Complex mineral soils and Gleys. The area is suitable to moderately suitable for tillage, pasture and meadow and suitable for forestry. However, the northern hill is less suitable for the mentioned practices due to its gley composition.

#### Land Uses

The Northern Uplands are rural in context, the area being largely dominated by pastureland. A number of agricultural lands areas are occupied by non-irrigated arable lands, mainly tillage, and small areas of naturally occurring vegetation. Land parcels are of medium to large size, with generally well-maintained low hedgerows. However, hedgerows contain trees which screen potentially scenic vistas at some sections along the local roads.

Small villages such as Newtown, together with a dispersed pattern of farm structures are indicative of a relatively low rural population density.

#### **Boundary Determinants**

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

#### **Critical Landscape Factors**

#### Elevated Vistas

A number of local roads run through Newtown Hills providing access for established villages within the uplands, e.g. Newtown village (located between the two existing hills). As a result of the elevation on the local roads and the generally low, well-maintained hedgerows, there are long distance views towards the Northern and North-western Lowlands.

#### Slopes

Sloping land often provides an area with its character and intensifies the visual prominence of any feature over greater distances, as in the case of the Newtown Hills. The gentle slope of this character unit also defines the visual boundary of the adjacent lowland areas and provides an increased potential for development to penetrate the ridgelines when viewed from local roads and villages in the area.

#### • Prominent Ridge Lines

Although the ridgelines of this upland area of Newtown Hills are not of major order, they locally appear as primary ridgelines when viewed from the lowland areas, due to the generally smooth terrain and flat topography of the surrounding environs.

Ridgelines generally perform the important roles of providing adjacent areas with a sense of visual identity, acting as dominant landscape focal points, and defining the extent of visual catchments. Therefore, it is important to avoid interruption by development that will reduce the integrity of Newtown Hills ridgelines.

#### Undulating topography

Gently undulating topography is presented within the upland area of this character unit. The dynamic nature of the existing undulating land between the two hills locally encloses vistas and helps to provide a realistic scale and visual containment not available in the generally open and flat lands of County Kildare.

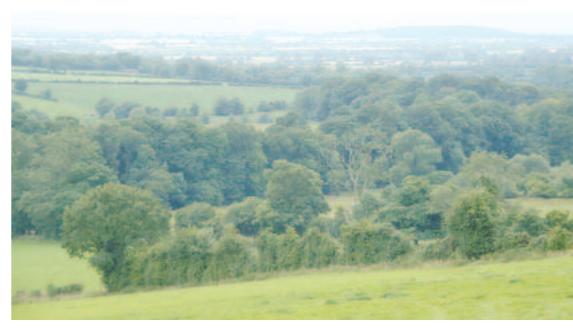
#### Low Vegetation

Low vegetation occurring in this unit as grassland and generally low hedgerows is generally uniform in appearance. It

fails to break up vistas and allows long distance visibility, thereby providing an inability to visually 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.



Long-distance scenic views of Kildare lowlands (above) and the neighbouring Wicklow Mountains (below). Existing tall hedgerows limit available views to the surrounding environs.



# 18.3.4 Chair of Kildare - Red Hill, Dunmurry Hill, Hill of Allen

#### Description

The Central Uplands or the Chair of Kildare as the area is locally known, consist of a number of hills that interrupt the continuity of the Kildare plains. This landscape character unit is located immediately north of Kildare town. The land rises to a maximum of 233m O.D. at Dunmurry Hill. The ridgeline of Dunmurry together with the ridgelines of Grange Hill (223m O.D.), Red Hill (197m O.D.), Boston Hill (159m O.D.) and Hill of Allen (219m O.D.) define the skyline of central Kildare and represent significant features on the landscape.

The elevated nature of this area provides highly scenic views over the central plains and boglands of Kildare.

Soils in the area are dominated by Grey Brown Podzolics combined with small pockets of mineral soils as well as raised bogs and reclaimed peats. The area is generally suitable for tillage, pasture and forestry, the suitability of boglands areas being unclassified.

#### **Cultural Significance**

The Hill of Allen is of mythological significance, with the legendary Fionn MacCumhaill and the Fianna. It is supposed to have been the site of their camp, with the surrounding area as their training ground.

#### Land Uses

The Chair of Kildare comprises a number of landuses. Large fields within this area are generally used as pasturelands, however a significant amount of non-irrigated agricultural lands, mainly containing tillage, can also be found. Coniferous forestry represents another significant landuse in the area, with some patches of naturally occurring vegetation, mainly at Allen and Dunmurry Hills. Allen Hill is characterised by the mineral extraction and quarrying activities on it's north-western part. Similarly, Boston Hill has a large area of gravel extraction activities. A visually dominant feature of Red Hill is the telecommunication mast located on the hilltop.

Land parcels within this unit are of medium to large size, with generally well-maintained low hedgerows. Small villages such as Allen, Killeagh and Guidenstown, together with a dispersed pattern of rural houses and farm structures are indicative of a relatively high rural population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the geology, subsoils (i.e. quaternary geology) and topography of the area, which largely coincide with the soils and landform and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

Elevated Vistas

A number of regional and local roads run through this landscape character unit. The roads cross the upper and lower slopes of the hills and provide access to established residences as well as to Kildare town. As a result of the elevated road level and the generally low vegetation, there are long distance and extensive views towards the surrounding lowlands and boglands.

#### Slopes

The slopes of the hills that form the Chair of Kildare define the visual boundary of the adjacent lowland areas. Sloping land intensifies the visual prominence of any feature over greater distances, as in the case of the Hill of Allen, Red Hills, Dunmurry and Grange Hills. Slope also provides an increased potential 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 Chair of Kildare, nearly all ridgelines are primary when viewed from the surrounding lowland areas.

Ridge lines perform the important roles of providing adjacent areas with visual identity, acting as dominant landscape focal points, and defining the extent of visual catchments.

#### Undulating topography

Gently undulating topography is presented within the upland area of this character unit, particularly to the south (i.e. between Red, Dunmurry and Grange Hills). The physical shielding within the lee of hills can conceal relatively large new features, where it does not break the skyline. The dynamic and complex nature of undulating land has the potential for locally enclosed vistas.

#### 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, thereby, providing an inability to visually 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.

#### • Localised Canal Views

Canal corridors are generally visually enclosed and highly localised areas of very distinctive character with a high degree of visual consistency. The area has localised vistas to the Milltown Feeder of the Grand Canal that runs south of Hill of Allen and north of Grange Hill.



Undulating topography and low vegetation (i.e. grassland) on the Northern Upland area

# Lowland areas

# 18.4 Lowland Areas - The Lowland Plains and Boglands

#### **POLICY STATEMENTS**

The lowland plains of County Kildare 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 flat 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.

#### There are five Lowland Areas:

- 1. Northern Lowlands
- 2. Southern Lowlands
- 3. North-Western Lowlands
- 4. Central Lowlands
- 5. Western Boglands

See the following pages for detailed profile of each character area.

It is the policy of the Council to:

- LA 1 To 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.
- LA 2 To recognise that this policy area contains the majority of the County's population. These also incorporate most of the major national and regional roads.

- LA 3 To continue to permit development that can utilise existing infrastructure, whilst taking account of local absorption opportunities provided by the landscape, landform and prevailing vegetation.
- LA 4 To continue to facilitate appropriate development in an appropriate manner, that respects the scale, character and sensitivities of the local landscape, recognising the need for sustainable settlement patterns and economic activity within the County.
- LA 5 To recognise that this policy area includes areas of significant landscape and ecological value, that are worthy of protection.
- LA 6 To recognise that intact boglands are critical natural resources for ecological and environmental reasons.
- LA 7 To recognise that cutaway and cut-over boglands represent degraded landscapes and/or brownfield sites and thus are potentially robust to absorb a wide variety of developments. This development however shall be carried out in such a way as not to prejudice the amenity potential.



Allen Hill viewed from the south

#### DONADEA FOREST (located within the Northern Lowlands)

It is the policy of the Council:

- LA 8 To ensure the preservation of the Forest and Demesne as an entity, including the surrounding walls, walled gardens, towers and other structures and features.
- LA 9 To preserve all the existing woodlands in the area, including individual trees, groups of trees, and avenues. To this end, it is the policy of the Council that the Forest Park shall remain as a recreational resource for public use, and that no part of the area may be developed for private use. In particular, no housing will be permitted within this Area, and all existing public rights of way will be retained.
- LA 10 To encourage the further development of the Forest Park for public recreational and amenity purposes, subject to the policies set out above.

# ROBERTSTOWN COUNTRYSIDE (located within the Northern Lowlands)

It is the policy of the Council:

LA 11 To protect the amenities of this area and to encourage the development of the water recreation facilities and other amenities. The Council will assist the Robertstown Countryside Committee and other bodies interested in developing the waterways, walking routes and other amenities of the area and will strictly control development.

#### 18.4.1 Northern Lowlands - Naas & Environs

#### Description

This extensive lowland area to the north-east of the County is bisected by the River Liffey valley. The Royal Canal runs along its northern boundary and the Grand Canal corridor follows a northeast to south-west alignment. This area is characterised by generally flat terrain and open lands with regular (medium sized) field patterns. Hedgerows are generally well maintained and low, with scattered trees along the field boundaries that partially screen the lowest lying areas. Nevertheless, the generally low-lying vegetation of the area allows long-distance and extensive visibility. Distant views include the skylines of the Eastern Uplands, the Newtown Hills to the west, and the Chair of Kildare hilltops to the south-west.

Soils in the area are dominated by complexes (generally mineral soils) with pockets of Grey Brown Podzolics and Gleys (Map 18.2 refers). The area is suitable to moderately suitable for tillage, pasture and meadow and suitable for forestry.

#### Land Uses

The predominant landuse in this area is pasture, with large areas of non-irrigated arable lands (mainly tillage). A number of coniferous plantations and deciduous woodlands can also be found, as well as large patches of bogland and peat extraction sites.

Settlement patterns in this area are linked to the closeness of Dublin City. Existing large towns such as Naas, Clane, Cellbridge, Leixlip and Maynooth, together with other small villages at the outskirts of major towns and a high density of dispersed rural houses and farm dwellings throughout the countryside, are indicative of a high population density. This character unit contains the largest population concentrations of the county.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the soils, topography and geology of the area, which largely coincide with the subsoils (i.e. quaternary geology) and landform, and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

Smooth Terrain

Smooth terrain and the generally flat topography and landform that characterise this landscape character unit, allow vistas over long distances without disruption. As a result development can have a disproportionate visual impact, due to an inherent inability to be visually absorbed.

Undulating topography

Gently undulating topography is presented at certain areas of this character unit, providing the potential for local visual enclosure thereby absorbing development where it does not break the skyline (i.e. it renders visually unobtrusive of the overall landscape scale). St. Patrick's Hill, Ardrass, Celbridge represents an important topographical feature within the Northern Lowlands area.

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 agricultural 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 visually absorb new development.

Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by coniferous plantations, deciduous woodlands and 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.

Localised River and Canal Views

River valleys and canal corridors are generally visually enclosed and highly localised areas of very distinctive character with a high degree of visual consistency.

This character unit includes sections of the River Liffey and the Grand and Royal Canals. Due to the low lying nature of this area, many views of the river valley and the canal corridors are available from the local roads and from the viewing points located on bridges.



### 18.4.2 Southern Lowlands

#### Description

This landscape character unit comprises an extensive lowland area to the south-west of the County, the River Barrow and the Grand Canal running along its western quarter. This area is characterised by generally flat terrain and open lands with regularly shaped large field patterns. Hedgerows are well maintained and low, with scattered trees along the field boundaries that partially screen the lowest lying areas. Nevertheless, the generally flat topography and the low lying vegetation allow long-distance and extensive visibility. Distant views include the skylines of the Eastern Kildare Uplands, the Newtown and Hughstown Hills and the Wicklow Mountains to the east, the Chair of Kildare hilltops to the north-east and the neighbouring hills of County Laois to the south-west.

Soils in the area are largely dominated by Grey Brown Podzolics, although pockets of gleys and mineral soils also occur. The area is generally classified as widely suitable for tillage, pasture, meadow and forestry.

#### Land Uses

The predominant landuse in this area is tillage, combined with other agricultural crops and relatively large areas of pastureland. A number of coniferous and mixed forestry plantations also occur, as well as small patches of deciduous woodlands and naturally occurring vegetation. Some bogland areas can also be found.

Existing large towns such as Monasterevin and Athy, together with other smaller settlements and dispersed rural houses and farm dwellings throughout the countryside, are indicative of a relatively high population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the soils, geology, and topography of the area, which largely coincide with the subsoils (i.e. quaternary geology) and landform, and are further confirmed by the existing land uses.

#### Critical Landscape Factors

Smooth Terrain

Smooth terrain and the generally flat topography and landform that characterised this landscape character unit, allows extensive vistas over long distances without disruption, as the planar surface does not break up fore and middle ground. Consequently, development can have a disproportionate visual impact due to an inherent inability to be visually absorbed by the flat terrain.

#### Low Vegetation

The grassland, large tillage fields and generally low well-maintained 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. Although existing low hedgerows partially screen the lowest land parcels, the generally low vegetation proves unable to visually absorb new development.

#### Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by coniferous plantations, deciduous woodlands and the presence of trees that grow on field hedgerows. Tall vegetation has a shielding and absorbing quality in landscape terms as 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.

#### Localised Water Corridor Views

River valleys and water corridors are generally visually enclosed and highly localised areas of very distinctive character and high degree of visual consistency.

This character unit includes sections of the River Barrow and the Grand Canal. Due to the low lying nature of this area, many views of the river valley and the canal corridor are available from the local roads and from the viewing points located on bridges.



# 18.4.3 North-Western Lowlands - Cadamstown & Environs

#### Description

This lowland landscape character unit is located on the north-western boundary of the county. The area is characterised by generally flat topography and smooth terrain, gently undulating around Carbury, to a maximum elevation of 142m O.D. at Carbury Hill. The occurring open lands with medium to large field patterns are bordered by well-maintained and low hedgerows, which contain scattered trees along some sections of the field boundaries. Although hedgerows partially screen the adjacent lowest lying areas, the commonly flat terrain allows long-distance visibility. Distant views include the skylines of Newtown Hills to the east and Allen Hill to the south-east.

Soils in the area are characterised by a combination of Grey Brown Podzolics and Gleys, with small pockets of Raised Bog soils. Consequently, the area is generally suitable for tillage, pasture and forestry, although lands overlying Gley soils are classified as poorly suitable for tillage and moderately suitable for pasture and forestry.

#### Land Uses

The predominant landuse in this area is pasture, with large areas of non-irrigated arable lands (mainly tillage). A relatively large area of mixed forest, combined with some coniferous plantations, can also be found. Extensive areas of bogland also occur, combined with peat extraction sites, as well as gravel extraction sites west of Cadamstown.

Existing small villages such as Carbury & Cadamstown, combined with other smaller settlements and dispersed rural houses and farm dwellings throughout the countryside, are indicative of a relatively low population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the soils, geology and topography of the area which largely coincide with

the subsoils (i.e. quaternary geology) and landform, and are further confirmed by the existing land uses.

#### Critical Landscape Factors

#### Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterise this landscape character unit, allows vistas over long distances without disruption. Consequently development can have a disproportionate visual impact in such terrain, due to an inherent inability to be visually absorbed.

#### Undulating topography

Undulating topography is presented around Carbury on this character unit, providing a physical shielding and visual enclosure of a built form within the lower-lying lands. These areas have a potential for visual enclosure, where development does not break the skyline.

#### Low Vegetation

The grassland, bog type grasses 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. Although existing hedgerows partially screen the lowest land parcels, the commonly low vegetation proves unable to visually absorb new development.

#### Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by mixed forests and 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 add to the complexity of a vista, breaking it up to provide scale and containment for built forms.



Smooth terrain and long-distance views onto the neighbouring Wicklow Mountains



Tillage fields and generally well-maintained and low hedgerows with some shelter vegetation (i.e. scattered trees and conifer plantation) on the Southern Lowlands

## 18.4.4 Central Undulating Lowlands

#### Description

This lowland landscape character unit is characterised by undulating topography and located in the centre of the County. The terrain gently rises to a maximum elevation of 147m O.D. at the east of the Curragh lands. The Curragh racing course and its natural grasslands represent a significant landscape feature in the area (see Chapter 10, Volume 1).

The generally medium sized open lands are bordered by well-maintained hedgerows that contain scattered trees along some sections of the field boundaries. Although hedgerows are generally low, the undulating lands provide the potential to screen adjacent low-lying areas. The skyline to the east is defined by the Eastern Kildare Uplands (see Section 18.3.1) and the Chair of Kildare (Section 18.3.4) defines the extent of visibility to the west.

Soils in the area are dominated by Grey Brown Podzolics combined with mineral soils. As a result, the area is suitable to moderately suitable for tillage, pasture, meadow and forestry.

The unit is generally perceived as being important and special in landscape terms (see Appendix 4), particularly due to the Curragh which is perceived as the most important landscape feature in the County (see also Section 18.7.1). The road that runs through the Curragh is considered to have scenic value and the area is perceived as having significant tourism potential however, it is not considered suitable for other type of developments - except for telecommunication antennae.

#### Land Uses

The Curragh natural grassland represents the larger and most considerable landuse in this unit. Agricultural lands, including tillage and complex cultivation patterns, are dispersed both to the north and south of the Curragh, with a dispersed pattern of large areas of coniferous and mixed forestry. Patches of peat bog also occur to the south of this character unit.

Established large population centres such as Kildare and Newbridge, combined with other smaller settlements such as

Milltown and a dispersed, relatively high density of rural housing on the outskirts of the major urban areas, are indicative of a high population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the geology, soils and topography of the area, which largely coincide with the subsoils (i.e. quaternary geology) and landform, and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

#### Undulating topography

The gently undulating topography that characterises this character unit provides physical shielding. The dynamic and complex nature of undulating lands have the potential to locally enclose vistas and thus, help to provide a realistic scale and visual containment where development does not break the skyline.

#### Elevated Vistas

The roads that run through the upper elevation areas of this undulating terrain allow long distance vistas to the Curragh open lands, as well as to the Northern and Southern Kildare Lowlands (see Sections 18.4.1 & 18.4.2).



Undulating topography and shelter vegetation around Carbury



Long-distance visibility due to the generally smooth terrain



These views however are interrupted along some sections by unmaintained and thus, tall hedgerows.

#### 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 for long distance visibility.

#### Shelter Vegetation

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

#### • Localised River Views

The River Liffey runs through this character unit, which is easily accessible by existing roads. Due to the undulating nature of this area, many views of the river valley are available from vantage points along the river valley. River valleys are generally visually enclosed and have very distinctive characters with a high degree of visual consistency.

# 18.4.5 Western Boglands

#### Description

This lowland landscape character unit, located to the western central part of the County, is characterised by flat topography and smooth terrain. The terrain has a high water table and it is badly drained, providing generally unstable and unproductive land. This area of the county is highly distinctive due to the existing large areas of bogland vegetation.

The commonly large sized open lands are often bordered by unmaintained hedgerows, which contain scattered trees, and have the potential to partially screen adjacent lands. Nevertheless, the generally low vegetation and the even ground provide extensive long-distance visibility. The skyline to the south of this unit is defined by the Chair of Kildare Hills and the Northern Uplands (i.e. Newtown Hills – see Section 18.3.3) define the skyline to the northeast.

Soils in the area are largely dominated by raised bog and reclaimed peat, with some areas of grey brown podzolics and complex mineral soils. The area is generally unclassified with some lands classified as suitable and other areas considered of poor suitability for tillage, pasture and being of moderate suitability for forestry.

#### Land Uses

The major landuse in the area is peat extraction due to the largely occurring natural resource in the area (i.e. mantled peatbogs). Although boglands dominate the landscape of this character unit, significant areas of pastureland can also be found, together with patches of tillage and non-irrigated arable lands. A complementary significant landuse in the areas is represented by the large coniferous forests planted in cutaway bogs and the natural revegetation occurring in set-aside cutaway areas.

Badly drained bogs and alluvial lands characterise the unit, which has remained unattractive to agricultural settlement. As a result, the area is thinly populated. However, small settlements such as Allenwood or Robertstown, combined with existing clusters of

scattered rural houses (e.g. Lullymore, Blackwood) can be found. Although there is a low population density, the recreation and tourism potential of the area is recognised.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the soils and topography of the area, which largely coincide with the subsoils (i.e. quaternary geology), geology and landform, and are further confirmed by the existing land uses.

#### **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 without disruption. Consequently, development can have a disproportionate visual impact in such terrain, due to an inherent inability to be visually absorbed by the planar terrain.

#### Low Vegetation

The grassland, moorland and bog type grasses that are commonly found in this unit, provide similar characteristics to smooth terrain in landscape terms. Bogland type vegetation and grassland are usually uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing low hedgerows around field boundaries partially screen the adjacent low-lying land parcels. Nevertheless, the commonly peat bog vegetation proves unable to visually absorb new development.

#### • Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of large coniferous plantations and scattered trees that grow on field hedgerows. Shelter vegetation has an absorbing quality in landscape terms; it can provide a natural visual barrier and add to the complexity of a vista, breaking it up to provide scale and containment for built forms.

Two of the Grand Canal feeders can be found in this character unit, local roads running parallel to the water corridor and being easily accessible. As a result many views of the canal are

available from the local roads and from viewing points located along the corridor. Water corridors are generally visually enclosed areas of very distinctive character with a high degree of visual consistency.



Long-distance visibility due to low vegetation and elevation



Undulating land and shelter vegetation at the Curragh

#### 18.4.5.1 Robertstown Countryside

The Landscape Character Assessment contained in this plan provides a comprehensive analysis of the landscapes of the county. The County Development Plan 1999 contained specific reference to the "Robertstown Countryside" which was the subject of a study carried out in 1978 by An Foras Forbartha. The relevant paragraphs are repeated hereunder and the area of the study is outlined on Map Reference 18.1.

The Robertstown area is highly important in respect of development of the waterways for recreational purposes. Robertstown countryside contains large areas of bogland which are being developed by Bord na Móna, Robertstown and Rathangan canal villages, Donadea Forest Park [section 18.4] and Ballinafagh Lake [refers section 17.2], listed as a wild fowl refuge, the Hill of Allen [refer section 17.3 & 18.3.4] and a canal system fed from nearby Pollardstown Fen [refer section 17.2 & 18.7.2].

In 1978 a study was completed on the "Recreational Resources of the Robertstown Area and their Potential Development". The study was carried out by An Foras Forbartha at the request of Kildare County Council and the Eastern Regional Tourism Organisation in association with Muintir na Tíre.

A major portion of the report considered how large areas of cutaway bog, which the area contains, might be used for amenity and recreational purposes by the creation of lakes for amenity use.

A large number of additional after uses suggested for these bogs ranged from agriculture, forestry and horticulture to recreation. This view was echoed in the report of the Independent Expert Committee on the Future Use of Cutaway Bog (Department of Energy 1991)

A co-ordinating committee for Robertstown Countryside was set up in 1981 to achieve the objectives for this area, such as the use of canal tow paths as linear parks, the setting up of long distance walking routes and the establishment of a Farm Interpretation Centre. A number of these objectives have been achieved, although the major development, the creation of the amenity lakes, has yet to take place.

The importance of the area for tourism development has been recognised both by Fáilte Ireland and Kildare County Council. The provision of an interpretative centre at Lullymore has greatly strengthened the tourism attractiveness of this area, as have allied private sector developments in the vicinity. The development of a canal boat centre at Lowtown/Robertstown will also have a major impact on tourism in the area.





# Transition Areas

### 18.5 Transition Areas

#### **POLICY STATEMENTS**

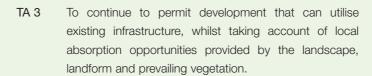
Transitional areas contain some of the elements of both the upland and lowland areas. This character unit is highly variable over short distances but is generally characterised by undulating topography, poorer drainage, higher water table, vigorous hedges and many hedgerow trees. The land is mostly used for stock rearing or some mixed tillage. Blocks of coniferous forestry, some new deciduous forestry and some successional woodland also occur within this character unit.



The flat terrain of the cutaway peatlands provide long-distance visibility

It is the policy of the Council:

- TA 1 To maintain the visual integrity of areas, which have retained a dominantly undisturbed upland character.
- TA 2 To 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.



TA 4 To continue to facilitate appropriate development in an incremental and clustered manner, where feasible, that respects the scale, character and sensitivities of the local landscape, recognising the need for sustainable settlement patterns and economic activity within the County.



Localised canal views



The generally low vegetation of the boglands complemented with existing hedgerow trees and conifer plantations



Smooth terrain and long distance visibility on the western boglands. The skyline to the south being defined by the Chair of Kildare (i.e. Red Hill above)

### 18.5.1 Eastern Transition Lands

#### Description

This transitional landscape character unit, located between the uplands and lowlands to the east of the County, is characterised by undulating topography. The River Liffey bisects the unit north and south. The lands are generally of medium size and regular pattern, with commonly well-maintained hedgerows. Gorse and natural vegetation occur at some areas of this unit.

The terrain gently rises from the lowland areas to the hilltops of the Eastern Kildare Uplands (see Chapter 19). The land undulates through a series of hilltops, the main ones being: Old Kilcullen Hill (179m O.D.) Bullhill (174m O.D.), Mullacash Hill (171m O.D.), Nine Tree Hill (168m O.D.) and Carrighill (166m O.D.). The elevated vantage points along the local roads provide long-distance views of the Kildare lowlands. The skyline to the east of this unit is defined by the Eastern Uplands, distant views including the neighbouring Wicklow Mountains, define the extent of visibility. The hilltops of the Chair of Kildare Hills (see Chapter 9, volume1) partially define the skyline to the west.

Soils in the area are composed of grey brown podzolics and complexes (mainly mineral soils). As a result, the area is classified as widely to moderately suitable for tillage, pasture and forestry.

The area is generally perceived as being important and special in landscape terms, particularly along the River Liffey valley. Preferred scenic drives are located within this unit, as part of the drives from Naas and Kilcullen to Ballymore Eustace. The unit is perceived as having some development potential to the south, along the primary national road.

#### **Land Uses**

The major and most extensive landuse in the area is pasture, with patches of non-irrigated agricultural lands (mainly tillage). Small clusters of naturally occurring vegetation together with some coniferous forests and woodlands can also be found.

Existing large towns, such as Kilcullen, and smaller settlements (e.g. Kill, Narraghmore, Ballitore, Timolin, etc.) combined with a high density of dispersed rural houses and farm structures are indicative of a relatively high rural population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the geology, and topography of the area, which largely coincide with the subsoils (i.e. quaternary geology), soils and landform, and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

Undulating topography

Undulating topography, which characterises this unit, provides a physical shielding within the lee of hills and thus, can conceal relatively large new features on the lower-lying lands. Furthermore, the dynamic and complex nature of undulating land encloses local vistas, rendering development unobtrusive on the overall landscape.

Slopes

Sloping land often provides an area with its character and intensifies the visual prominence of any feature over greater distances. The gentle slopes of the hills in this character unit start to define the visual boundary of the adjacent lowland areas (further defined by the Eastern Uplands) and provides an increased potential for development to penetrate the ridgelines when viewed from local roads and villages in the area.

Low Vegetation

The grassland, tillage fields and generally low hedgerows of this area are usually uniform in appearance, failing to break up vistas, and allowing long distance visibility. Existing well-maintained hedgerows partially screen the lowest land parcels. Nevertheless, the commonly low vegetation proves unable to visually absorb new development.

• Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by coniferous plantations and the presence of scattered 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.

Localised River Valley Views

This character unit is bisected by the River Liffey valley. River valleys are visually enclosed and highly localised areas of distinctive character with a high degree of visual consistency. Due to the undulating nature of this area, many views of the river valley are available from vantage points along the local roads.



# River Valleys & Water Corridors

# 18.6 River Valleys and Water Corridors

#### **POLICY STATEMENT**

Water corridors and 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 localised or site-specific within this unit.

#### There are four River Valley & Water Corridor Areas:

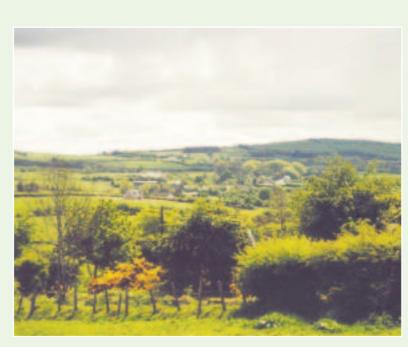
- 1. River Liffey
- 2. River Barrow
- 3. Grand Canal
- 4. Royal Canal

See the following pages for a detailed profile of each character area

It is the policy of the Council:

- RW 1 To direct new development whenever possible towards the vicinity of existing structures and mature vegetation.
- RW 2 To 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.
- RW 3 To control development that will adversely affect distinctive linear sections of water corridors and river valleys, especially open floodplains.

- RW 4 To co-operate with the DoEHLG in the protection and conservation of the Canals and River Barrow, designated as an NHA and SAC respectively [refer to chapter 17 for full details of designated sites & related policies].
- RW 5 To promote the amenity, ecological and educational value of the canals and rivers within the County while at the same time ensuring the conservation of its fauna and flora, and protection of the quantity and quality of the water supply.
- RW 6 To pursue the establishment of the Barrow Valley, the River Liffey Valley and the Canals as Areas of Special Amenity, as per section 202 of the Planning and Development Act, 2000-2004.



Undulating topography and combined low/shelter vegetation in transitional lands



Natural vegetation along the shores of the Liffey Valley

## 18.6.1 River Liffey

#### Description

The Liffey Valley is located on the north-eastern quarter of the County, flowing in a north-east to south-east pattern and its waters winding along the central lowlands. Many towns have become well established along the riverbanks, such as Leixlip, Celbridge, Clane, Newbridge, Kilcullen and Ballymore Eustace, where the River Liffey flows into Pollaphuca Reservoir.

This lowland unit, characterised mostly by smooth terrain and low vegetation, has extensive open mountain views (i.e. the Chair of Kildare to the west and the Eastern Uplands to the east; distant views including the neighbouring Wicklow Mountains).

Soils in the area are classified as Regosols (of alluvial origin) and are widely suitable for tillage, pasture, meadow and forestry.

Generally, the river valley is identifiable by its floodplain levels and slopes of naturally occurring shrubs and trees with a slow progression to grasslands. At some sections, pasturelands directly occur on the floodplains, whilst conifer and deciduous forest occupy some other parcels. Large tillage fields with few inner boundaries are also common in this area, with well-trimmed and thus low hedgerows that allow for long-distance visibility.

The river valley lands gently undulate as it runs through the upland areas of the County. Along this section, deciduous woodlands are commonly found on the gentle slopes that rise from the valley.

This landscape character unit is perceived as having significant landscape value, and as being both special in landscape terms and sensitive to development. It is also perceived as having high amenity value, preferred scenic drives running along its corridor. The river valley is considered to be a landmark of the County - particularly between Kilcullen and Ballymore Eustace. The rich mix of water and land features along the valley and the extent of the corridor, characterise this area of the County.

#### **Land Uses**

The fertile Liffey Valley area is well drained providing good soil conditions and the potential for a variety of agricultural and horticultural uses. A large proportion of the river shore is occupied by natural vegetation. Although pasturelands generally occupy the riverbanks, there are also a significant number of large tillage fields. Small parcels of coniferous and deciduous forests also occur along the river valley.

The local population of County Kildare is largely concentrated along the Liffey Valley. Major urban centres include Leixlip, Celbridge, Clane, and Newbridge. Smaller settlements can also be found (e.g. Kilcullen, Ballymore Eustace, Straffan, Athgarvan). Scattered houses and farm structures are dispersed in the rural hinterland. The Liffey Valley embraces a high population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the subsoils of the area, which largely coincide with the landform, and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterise this landscape character unit, allow vistas over long distances without disruption along the river corridor. As a result development on the shores of the river can have a disproportionate visual impact, due to an inherent inability to be visually absorbed.

Undulating topography

Undulating topography is presented at some sections of this character unit (particularly to the southeast) where the land gently rises at floodplain slopes. This provides a physical shielding and has the potential to visually enclose the built form within the river valley, where it does not break the skyline.

Low Vegetation

The grassland, tillage fields and generally low hedgerows along the river corridor are commonly uniform in appearance, failing

to break up vistas, allowing long distance visibility and proving unable to visually absorb new development.

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, as well as by conifer plantation in adjacent lands. 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 as well as add to the complexity of a vista.

Localised River Views

This character unit follows the path of the Liffey River, which is easily accessible by the local roads. Many views of the river valley are available from the local roads and from vantage points and bridges located along the water corridor.



Shelter vegetation (naturally occurring and coniferous plantations) above and grassland on the riverbanks of the Liffey below



Shelter vegetation (continued)

#### 18.6.2 River Barrow

#### Description

The Barrow Valley is an extensive river valley flowing in a north-south pattern along the western boundary of the County. The river valley is easily accessible by local roads and many towns have become well established along the riverbanks, such as Monasterevin and Athy.

The river valley is characterised by its floodplain levels and gentle slopes of deciduous trees with a slow progression to pasture lands. Running along the Barrow Way, the riverbanks are predominately grassland, although sometimes there is a transition of natural vegetation. Medium to large tillage fields with hedgerow boundaries are also common to the river valley.

The terrain is generally even with long-distance views of mountains – the Chair of Kildare hills and the Eastern Uplands, and the Wicklow Mountains being discernible to the east.

Soils in the area are composed of complexes (mainly mineral soils) of alluvial origin. They are classified as suitable to moderately suitable for tillage, pasture and meadow and suitable for forestry.

#### Land Uses

The fertile valley area is well drained providing mixed uses such as agricultural and horticultural crops. A large proportion of the river shore is occupied by natural vegetation. Although pasturelands generally occupy the riverbanks, there are a significant number of tillage fields occurring adjacent to the riverbanks. Small parcels of coniferous and deciduous forests also occur along the valley.

The local population is concentrated in the towns of Monasterevin and Athy, however, smaller settlements can also be found. Scattered houses and farm structures are dispersed in the rural hinterland. The settlement pattern of the Barrow valley area is indicative of a relatively high population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the soils of the area, which largely coincide with the landform, and are further confirmed by the existing land uses.

#### **Critical Landscape Factors**

#### Smooth Terrain

Smooth terrain and the generally gentle topography and landform that characterise this landscape character unit, allow long-distances views of the water corridor and the surrounding environs. It is noteworthy that development on the river shores can have a disproportionate visual impact as a result of 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. Grassland vegetation and tillage crops are commonly for 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 visually absorb new development.

#### 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 add to the complexity of a vista, breaking it up to provide scale and containment for built forms.

#### Localised River Views

This character unit follows the path of the Barrow 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. River valleys are generally visually enclosed and highly localised areas of very distinctive character with a high degree of visual consistency.



Smooth terrain and grassland on the banks of the River Barrow, with natural vegetation along its shores.



### 18.6.3 Water Corridors - Grand Canal

#### Description

The Grand Canal is an extensive water corridor that flows in an east to south-west direction through the County. The canal corridor is divided at Sallins into the Naas and Corbally Branch, and is further divided in three branches at Robertstown: the Milltown Feeder, the Barrow Line and the continuation of the Grand Canal into the neighbouring County Offaly. The canal corridor is easily accessible by local roads and a number of towns have been established along the canal banks such as Allenwood, Robertstown and Rathangan.

Smooth terrain and even topography characterise the canal corridor which generally progress into pasturelands and boglands, although natural vegetation occurs at some of the sections. The corridor and its adjacent lands have been landscaped and enhanced along the sections where the canal crosses urban areas. Canal locks are distinctive features of this water corridor.

Long-distance views of the canal corridors can be obtained from existing bridges and distant views of the County uplands (such as Red Hill and Allen Hill) can also be gained from certain vantage points.

#### Land Uses

The canal provides drainage to adjacent lands, rendering them a higher potential for mixed use. Nevertheless, grasslands are a common progression of the canal shores pasture being the major landuse along the water corridor. Where the canal runs through bogland areas, bog type grasses and natural vegetation can be found in lands adjacent to it. Large tillage fields also occur at some areas, as well as coniferous plantations and mixed forests.

Small settlements such as Allenwood and Robertstown, together with a significant number, however dispersed pattern, of scattered houses on the canal shores, are indicative of a relatively low population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the ecological designation of the canal as a proposed Natural Heritage Area by the Heritage Service.

#### **Critical Landscape Factors**

#### Smooth Terrain

Smooth terrain and the generally gentle landform that characterised this landscape character unit, allow vistas over long distances without disruption, where the canal flows in a in a straight-line direction. Consequently, development can have a disproportionate visual impact along this water corridor, due to an inherent inability to be visually absorbed by the existing topography.

#### Low Vegetation

The grassland, and bogland grasses that occur at the banks of the canal corridor are low and commonly uniform in appearance, failing to break up vistas, and allowing long distance visibility. Thereby proving unable to visually absorb new development.

#### Shelter Vegetation

Shelter vegetation is represented at this unit by the presence of natural vegetation that grows along the shores of the canal, as well as by coniferous and mixed plantations adjacent to the water corridor. Shelter or tall vegetation has a shielding and absorbing quality in landscape terms, as it provides a natural visual barrier as well as adding to the complexity of a vista.

#### Localised Canal Views

This character unit follows the path of the Grand Canal, which is easily accessible at many points from the local roads – and sometimes runs parallel to this landscape feature. Consequently, many views of the canal are available, both from the local roads and from viewing points on bridges located along the canal corridor. Water corridors are generally visually enclosed with a highly localised areas of very distinctive character and high degree of visual consistency.



Long-distance views of the canal corridor with shelter vegetation screening adjacent lands.



Bogland type of vegetation along the canal lands allowing for extensive and long-distance visibility



Pasturelands adjacent to the canal corridor and distant views of Allen Hill

# 18.6.4 Water Corridors - Royal Canal

#### Description

The Royal Canal flows in an east to west direction along the northern boundary of the County. The canal corridor flows through Leixlip, Maynooth and Kilcock and continues into the neighbouring County Offaly. Local roads run parallel to the corridor along some sections.

Smooth terrain and even topography characterise the canal corridor, which generally progresses into pasturelands, although natural vegetation occurs at some of the sections and tillage fields can also be found in adjacent lands. The lands along the corridor have been landscaped and enhanced where the canal crosses urban settlements. Canal locks are distinctive features of this water corridor.

Long-distance views of the canal corridor and its surrounding environs can be obtained from local roads and existing bridges.

#### Land Uses

The canal provides drainage to adjacent lands, increasing the potential for mixed use. Nevertheless, grasslands are a common progression of the canal shores. Although pasture is the major landuse along the water corridor, large tillage fields also occur at some areas, as well as coniferous plantations and mixed forests.

Large urban settlements such as Leixlip and Maynooth, together with a significant number of scattered houses along the canal shores, are indicative of a relatively high population density.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the ecological designation of the canal as a proposed Natural Heritage Area by the DoEHLG.

#### **Critical Landscape Factors**

Smooth Terrain

Smooth terrain and the generally gentle landform that characterise this landscape character unit, allow vistas over

long distances without disruption where the canal flows in a straight-line direction. Consequently, development can have a disproportionate visual impact along this water corridor, due to an inherent inability to be visually absorbed by the existing topography.

#### Low Vegetation

The grasslands that generally occur at the banks of the canal corridor are low and commonly uniform in appearance, failing to break up vistas, and allowing for long distance visibility. Thereby proving unable to visually absorb new development.

#### Shelter Vegetation

Shelter vegetation is represented at some stretches of this unit by the presence of natural vegetation growing along the shores of the canal, as well as by coniferous plantations adjacent to the water corridor. Shelter or tall vegetation has a shielding and absorbing quality in landscape terms, as it provides a natural visual barrier as well as adding to the complexity of a vista.

#### Localised Canal Views

This character unit follows the path of the Royal Canal, which is easily accessible at many points from the local roads – and sometimes runs parallel to this landscape feature. Consequently, many views of the canal are available, both from the local roads and from viewing points on bridges located along the canal corridor. Water corridors are generally visually enclosed with a highly localised areas of very distinctive character and high degree of visual consistency.



Localised canal views



Development affecting the distinctive character and integrity of the canal corridor



Canal lock – a distinctive feature of the canal corridors



Enhanced canal corridor along urban area

# Special Landscape Areas

### 18.7 Special Landscape Areas

#### There are three Special Landscape Areas:

- 1. The Curragh
- 2. Pollardstown Fen
- 3. Allen Remnant Bogs

See below and the following pages for a detailed profile of each character area.

### 18.7.1 The Curragh

#### Description

The Curragh is an extensive open plain, consisting of an unenclosed natural grassland area and is proposed to be designated and protected as a Natural Heritage Area. The site lies about 3 km south west of Newbridge and extends for some 10 km in a north-west to south-east direction being approximately 5km at its' widest point. The area of the Curragh Camp and the Curragh Racecourse are located within the plain, however the town and most of the racecourse are excluded from the proposed ecological designation. The site is bisected by the M7/N7 motorway and a railway line.

The Curragh constitutes a unique national asset from the point of view of landscape and geomorphology. The Curragh area, over 2000 hectares, is an historic open plain of high conservation value (briefly described in the following paragraphs). Extensive views can be obtained from the south-east of the site, at St. Legers Bottoms, around much of the perimeter of the site. Unfortunately the sense of openness has been diminished over the years by the development of the Military Camp, the racecourse complex, the railway, the new motorway and power lines. Nonetheless, taking the cultural and natural facets together, it is possibly the only landscape of its kind in the world.

The solid geology of the area consists of limestone bedrocks. Overlying this are quaternary deposits. Glacial and glacio-fluvial deposits are generally very thick in the Curragh, usually 20-70 m. For the most part the soils of the Curragh fall under the category of grey-brown podzolics.

The site is of conservation value for a number of reasons. It is most unusual in an Irish, European and even worldwide context, in that it is an extensive open plain area of lowland acidic grassland, succeeding to dry heath in places. It has been grazed but unfertilised for hundreds, perhaps even thousands of years. Due to the management regime on the open grassland, nationally important populations of rare fungi are found, which only occur in ancient grasslands.

Although lowland acidic grassland is the dominant habitat at the site, there is a variation in the grassland, which is due in part to the soil variation and to the grazing regime. Gorse covers approximately 10-20% of the site and is associated mainly with the undulating hills within the site. Heather can also be found. There is succession-taking place especially at the perimeter. Hawthorn and Bramble are present with very occasional Sycamore Elder, Willow and Ash samplings. Endangered species (e.g. Blue Fleabane) and Wet Heath species (listed on Annex I of the E.U. Habitats Directive) can also be found within the site.

#### Land Uses

Landuse at the Curragh is dominated by sheep grazing on the open plains which is a commonage, but is controlled by a ranger. Horse exercising and training is carried out on the many gallops within the site as well as on the open grasslands. There is also the associated development of roads and tracks close to the gallops. There is a military range at the south east of the site where target practice is regularly carried out. There has been planting of coniferous and non-native deciduous species along many of the roads of the Curragh and there are occasional afforested patches on the open plains.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the ecological designation of The Curragh as a proposed Natural Heritage Area by the Heritage Service.

#### **Critical Landscape Factors**

Smooth Terrain

Smooth terrain and the generally gentle landform that characterise this landscape character unit, allow for vistas over long distances without disruption. Consequently, development

can have a disproportionate visual impact in the local context, due to an inherent inability to be visually absorbed by the existing topography.

#### Low Vegetation

The grasslands and sparse gorse that generally occur at The Curragh fail to break up vistas, thereby allowing for long distance visibility. The low vegetation proves unable to visually absorb new development.

#### • Shelter Vegetation

Shelter vegetation is represented at particular areas of this unit by the presence of coniferous plantations and natural vegetation. Shelter or tall vegetation has a shielding and absorbing quality in landscape terms, as it provides a natural visual barrier as well as adding to the complexity of a vista.

#### POLICY STATEMENT

#### The Curragh and Environs

It is the policy of the Council:

- CE 1 To restrict development, particularly on the Curragh edge, or where it obtrudes on the skyline as viewed from the Curragh Plains.
- CE 2 To ensure that fencing, earth works or planting do not conflict with the intrinsic quality of the landscape.
- CE 3 To consider the making of a Area of Special Amenity for the Curragh and Environs. It is also the policy of the Council to co-operate with the Department of Defence, the DoEHLG, the racehorse industry, the owners of sheep grazing rights and the various interests currently with rights to the Curragh, with a view to its designation as a National Park.
- CE 4 To co-operate with the DoEHLG in the protection and conservation of the Curragh, designated as a NHA [refer to section 17 for full details of designated sites & related policies].

# Special Character Areas

### 18.7.2 Pollardstown Fen

#### Description

Pollardstown Fen is situated on the northern margin of the Curragh, approximately 3km west-north-west of Newbridge. It lies in a shallow depression, running in a north-west/south-east direction. Pollardstown fen is the largest spring-fed fen in Ireland and has a well developed flora and fauna. From a landscape point of view, the unique vegetation and the low-lying nature of the area allows for extensive vistas of the site along the local roads, as well as to the hilltops in the vicinity (e.g. The Hill of Allen).

About 40 springs provide a continuous supply of water to the fen. These rise chiefly at its margins, along distinct seepage areas of mineral ground above the fen level. The continual inflow of calciumrich water from the Curragh, and from the limestone ground to the north, creates waterlogged conditions, which lead to peat formation. There are layers of calcareous marl in this peat, reflecting inundation by calcium-rich water.

Pollardstown Fen is unusual in Ireland as it is an extensive area of primary and secondary fen peat, lacking scrub vegetation on its surface. The fen vegetation is generally from 0.5 - 1.5 m high and consists mainly of Sedges, Reeds and Rushes. The vegetation is quite varied and species-rich with numerous well-defined plant communities and several rare or scarce species, including Orchids and the Broad-leaved Bog Cotton.

#### Land Uses

Damp pastures occur on wet mineral soils and partly-drained peats on the fen margins. These are reasonably species-rich, with particularly good displays of orchids in some areas. The fen has ornithological importance for both breeding and wintering birds. Otter and Brook Lamprey, two species listed in Annex II of the EU Habitats Directive, occur at Pollardstown. Owing to the rarity of this habitat and the numbers of rare organisms found there, the site is rated as of international importance.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the ecological designation of Pollardstown Fen as a proposed Natural Heritage Areas by the DoEHLG. However the significant sphere of influence would extend beyond the designated site.

#### **Critical Landscape Factors**

- Smooth Terrain
  - Smooth terrain and the generally flat topography that characterised this landscape character unit, allow vistas over long distances without disruption. Consequently, development can have a disproportionate visual impact in the local context, due to an inherent inability to be visually absorbed by the existing topography.
- Low Vegetation

The fen vegetation characteristic at Pollardstown is commonly low and uniform in appearance, failing to break up vistas and thus allowing long distance visibility. The low vegetation in the area proves unable to visually absorb new development.

• Shelter Vegetation

Shelter vegetation is represented at limited areas within this unit by the presence of natural vegetation, particularly at the margins of the fen. Shelter or tall vegetation has a shielding and absorbing quality in landscape terms, as it provides a natural visual barrier as well as adding to the complexity of a vista.

#### POLICY STATEMENT

#### Pollardstown Fen

It is the policy of the Council:

PF 1 To co-operate with the DoEHLG in the protection and conservation of the Fen, a designated SAC [refer to chapter 17] and the surrounding sphere of influence.

PF 2 The Council will promote the amenity, ecological and educational value of the Pollardstown Fen Area while at the same time ensuring the conservation of its fauna, flora, and protection of the quantity and quality of the water supply to the Fen from the Curragh aquifer.



The generally smooth terrain and low vegetation with some shelter vegetation at the Curragh



Flat topography and low vegetation within Pollardstown Fen

# Special Landscape Areas

## 18.7.3 Allen Remnant Bogs

#### Description

This bogland area is located about 3 km north-west of Newbridge and under the Hill of Allen. In comparison to other bogs in the east midlands this is relatively dry except for a line of pools near the southern edge. However, it is of scientific interest and although there are few remaining bogs in Kildare, none is comparable in size. In landscape terms the smooth terrain and even topography of the area, combined with the extensive open views within the site and to the surrounding environs, the lack of shelter vegetation and the unique soil and vegetation characteristics, make Allen Wood (known as Mouds Bog) a unique feature of this eastern quarter of County Kildare.

The surface is generally flat, although domed in profile, but fairly even with poor development of the micro-topography (hummocks, hollows, pools) usually found on bogs. The few small areas of hummocks and hollows occur mostly north and west.

#### Land Uses

The vegetation is typical of raised bogs. Hand turf cutting is widely practised along the southern margin of the bog, in the south-west corner and in the centre of the northern edge. Parts of the western area of the bog have been prepared for peat moss production. Some small areas have been reclaimed for agriculture in recent years.

#### **Boundary Determinants**

The boundaries of this unit are directly derived from the ecological designation of Allen Bog (known as Mouds Bog) as a proposed Natural Heritage Areas by the Heritage Service.

#### **Critical Landscape Factors**

Smooth Terrain

Smooth terrain and the generally flat topography that characterise this landscape character unit, allow vistas over long distances without disruption. Consequently, development can have a disproportionate visual impact in the local context, due to an inherent inability to be visually absorbed by the existing topography.

#### Low Vegetation

The fen vegetation characteristic at Pollardstown is commonly low and uniform in appearance, failing to break up vistas and thereby allowing for long distance visibility. The low vegetation in the area proves unable to visually absorb new development.

#### Shelter Vegetation

Shelter vegetation is represented at limited areas within this unit by the presence of natural vegetation, particularly at the margins of the bogland area. Shelter or tall vegetation has a shielding and absorbing quality in landscape terms, as it provides a natural visual barrier as well as adding to the complexity of a vista.

#### **POLICY STATEMENT**

#### Allen Remnant Bogs

It is the policy of the Council:

- AR 1 To co-operate with the DOEHLG in the protection and conservation of the Allen Remnant Bog (Mouds Bog) a designated SAC. [Refer to chapter 17]
- AR 2 To promote, in conjunction with Bord na Móna and the IPCC, the amenity, ecological and educational value of Allen Remnant Bog (Mouds Bog) while at the same time ensuring the conservation of its fauna and flora.



Smooth terrain and low vegetation characterise Allen Bog



Smooth terrain and low vegetation characterise Allen Bog

# 18.8 A guide to assessing landscape sensitivity

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. On the other hand, it is also important to assess the landscape capacity to absorb change.

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

- 1) **Topography** The landform and elevation have significant influence on visual impacts: e.g. development in elevated areas will usually be visible over a wide area; development in enclosed areas formed by undulating lands will not.
- 2) Vegetation—Existing vegetation and the potential for planting of an area also influence the capacity to absorb new development: e.g. areas which support (or which have the potential to support) trees, tall hedges and woody vegetation have the capacity to screen (partially or totally) new development. Areas that cannot easily sustain such vegetation will be unlikely to screen new development.
- 3) Visibility The combination of both topography and vegetation will determine the extent of visibility: e.g. flat terrain with low vegetation will allow for long-distance visibility; undulating topography and shelter vegetation will limit the extent of visibility.
- 4) **Development** New development is less likely to be conspicuous in the context of existing development in the landscape. Design, siting and layout also have major bearing with regards to the visual impact of proposed developments.

#### 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 above, help to identify the landscape sensitivity and development absorption capacity of County Kildare landscapes.

#### Landscape Terminology

#### 1) Degraded Areas

Degraded areas can be considered part of the robust areas (see Map 18.3), 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:-

Table 18.2 Degraded Landuse Categories

- Construction sites
- Mineral extraction sites

#### 2) Robust Areas

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

Table 18.3 Robust Landuse Categories

- Continuous urban fabricDiscontinuous urban fabric
- Industrial or commercial units
- Airports
- Sports and Leisure Facilities

These landuse categories include towns and built up areas, suburban and other developed areas (see Map 18.3). These areas can support new development, as it is less likely to be conspicuous in the context of existing development in the landscape.

#### 3) Normal Areas

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

Table 18.4 Normal Landuse Categories

- Pasture lands
- Non irrigated arable land
- Annual crops associated with permanent crops
- Complex cultivation pattern
- Coniferous forest
- 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 can screen and therefore

absorb the visual impacts of development. Although the hedgerows are generally low and well-maintained, they also

partially screen certain areas. Small copses of trees or mature hedgerows which sub-divide fields also have locally significant potential to screen development.

#### 4) Sensitive Areas

Sensitive landscape areas are determined by combining the following landuse categories from the CORINE Land Cover Project (see Map 18.4):-

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

Table 18.5 Sensitive Landuse Categories

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	
	-	

#### 5) Vulnerable Features

Vulnerable features consist of linear environmental factors such as the shores of water bodies (e.g. lakes, rivers) and the ridges or skylines of mountains and hills (see Map18.5). 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. This happens because of strong contrasts of form and colour where there is visual contact between the land and sky or water. Therefore, they represent vulnerable features in the landscape because any development on or in the vicinity of shores or skylines has the potential to affect the visual integrity of a wide surrounding environment.

# 18.9 Development Impact - Landscape sensitivity Matrix Perceptions of Landscape Impacts

The purpose of the Development Impact - Landscape Sensitivity Matrix is to provide a quick reference guide for both planners and developers to determine the likely perception of landscape impacts by development in a particular area. Due to the fact that all developments are unique in appearance and landscapes often vary at a micro level, it must be remembered that:

It is a guidance and decision supporting tool, not a decision making tool. Actual perception (and acceptability) of the project is influenced by a much wider range of cultural, economic and social issues.

#### Basis

The basis for the Matrix is the fusion of the Development Impact Potential and the Landscape Area Sensitivity.

#### (A) Development Impact Potential

The Development Impact Potential Table summarises the major landscape impact issues associated with a number of development types. The landscape issues are largely associated with:

#### Scale

This refers to the physical dimensions of buildings, plant, or structures associated with a development. Intensity refers to the spatial density of such physical elements. For example a wind farm might be considerably taller than an industrial complex but has a lower intensity of development due to the considerable distances between turbines.

#### Extent

This refers to the physical area covered by a development.

#### Appearance

Relates to the colours, materials, shapes and arrangement of the physical elements of a development. The critical issue is whether these elements conform or contrast with the existing visual environment.

#### Integrity

This refers to the necessity for the specific siting of a development. In the case of communications masts or wind farms, these may require elevation for line of site serviceability or economic viability respectively. The resultant impacts relate to visual prominence or interruption of the natural landscape vista features, from areas of the public realm.

#### Benefit

The degree of public benefit for each development type is also taken into account, on the basis that landscape impacts of developments that serve the greater public good are perceived to be acceptable in instances where development is not solely for private gain.

Table 18.6 Perception of Visual/Landscape Impact

Development Impact Potential	Wind Farms	Bog/Peat Extraction	Forestry	Telecom. Structures	Quarries	Roads	Rural Housing			
Scale	5	5	4	3	3	4	1			
Extent	4	4	4	3	4	4	1			
Appearance	4	1	2-4	3	4	2	2-4			
Integrity	2	1	2-4	2	2	2	2-4			
Benefit (public)	2	1	2-4	2	4	1	4			
Total	17	12	14 - 20	16	17	13	10 - 14			
Key 1 = Low contrast - High benefit 5 = High contrast - Low benefit 10 -13 = Low  The results above can be summarised in perception of visual/landscape impact ranges below:  13-16 = Medium  16- 20 = High										

#### (B) Landscape Area Sensitivity

The Landscape Area Sensitivity is determined by the vulnerability and landscape factors within the identified Landscape Character Areas. In other words the capacity of the landscapes to absorb new development is determined by the following factors:

#### Slope

Sloping land provides both an increased elevation and increasing 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. Slope often defines and encloses areas of different character.

#### Major Ridgelines

Major skylines are visible over a wide area (any area will be visible against the skyline if viewed from a lower elevation). Such ridgelines are conspicuous features of the natural landscape to which the eye is drawn because of strong contrasts of form and colour between the land and sky. They

are vulnerable features in the landscape because any development on or in the vicinity of skylines has the potential to affect the visual integrity of a wide surrounding environment.

Table 18.7 Sensitivity of Landscape Character Areas

Landscape Area Sensitivity	Northern Lowlands	Western Boglands Lowlands	North Western	Northern Hills	Chair of Kildare	Southern Lowlands	Central Undulating Lands	Transition Lands	Eastern Uplands	South- Eastern Uplands	Water Corridor
Slope	1	1	1	4	5	1	2	4	5	5	3
Major Ridgelines	1	1	1	4	5	1	2	3	4	4	1
Water Bodies	5	3	1	1	3	3	3	2	3	1	5
Land Uses	2	5	4	3	2	4	4	3	3	3	5
Prior Development	1	4	4	5	5	3	3	4	5	5	5
Total	10	14	11	17	20	12	14	16	20	18	18

Key
1 = Low sensitivity - High benefit
5 = High sensitivity - Low benefit
10 -13 = Low 13-16 = Medium 16-20 = High

#### Water Bodies

The shores of water bodies are conspicuous features of the natural landscape to which the eye is drawn because of strong contrasts of form and colour between the land and water. Shorelines are also vulnerable features in the landscape because any development on or in the vicinity of shores has the potential to affect the visual integrity of the surrounding environment.

#### Land Uses

Areas that are visually open and exposed with sparse or low growing vegetation cover can not provide screening to developments. As a result, any development has the potential to be visible over a wide area. Conversely broadleaved, mixed forest and transitional woodland scrub areas, which support taller vegetation have the potential to screen development (However these categories are sensitive themselves due to their natural character and their longevity in the landscape; any loss to of such mature vegetation could cause a visual impact over a wide area).

#### Prior Development

Areas that already contain a significant number or scale of existing development will contrast with surrounding landscapes. Additional development adjacent to such areas will be significantly less likely to be conspicuous or to contrast.

Table 18.8 Likely Perception of Landscape Impacts - Perception of Landscape Visual/Landscape Impacts versus Sensitivity of Landscape Character Area

Impact Sensitivity	Perception Landscape Impact	Northern Lowlands	Western Boglands	North-Western Lowlands	Northern Hills	Chair of Kildare Lands	Southern Lowlands	Central Undulating	Transition Lands	Eastern Uplands	South-Eastern Uplands	Water Corridors
Landscape Sensitivity		10	14	11	17	20	12	14	16	20	18	18
Wind Farms	17	H	H M	H	Н	Н	H M	H	H M	Н	Н	Н
Bog/Peat Extraction	12	NA L	L M		NA H	NA H		L M	L M	NA L	NA L	Н
Forestry	14-20	MH	MH	MH	MH H	MH H	MH	MH M	MH M	MH H	MH H	MH H
Telecom. Structures	16	M	M M	M	М	М	M	M M	M M	М	М	М
Extractive Industry	17	H	H	H	Н	Н	H	H M	H M	Н	H	Н
Roads	13		L M		Н	Н		L M	L M	Н	Н	Н
Rural Housing	10-14	LM L	LM M	LM L	LM H	LM H	LM L	LM M	LM M	LM H	LM H	LM H

In all cases on table 18.8, the top left hand corner of the shaded boxes relates to the impact of a particular type of development, while the bottom right hand corner relates to the sensitivity of particular landscape character area.

The following, taken from the above table, is an example of how the table should be read. **Example:** Forestry in the North-Western Lowlands

Forestry is given a rating of 14-20 (this was the total figure arrived at for the overall sensitivity of Forestry as per table 18.6). As this range falls between the medium and high categories in table 18.6, it appears as 'MH' in table 18.8.

North-Western Lowlands is given a rating of 11 (this figure determines the sensitivity of the North-Western lowlands area, as being in the range 10-13 as per table 18.7). As this figure is deemed low in table 18.7, it appears as 'L' in Table 18.8.