

4.0 Loughmacask Local Area Plan Policy Framework

In this chapter policies and objectives are set out to provide for the proper planning and sustainable development of the Loughmacask Area over the six year lifetime of the plan.

The policies and objectives outlined are specific to the Loughmacask plan area and do not apply to locations outside of the LAP boundary. In addition the policies and objectives of the Kilkenny and Environs Development Plan and subsequent revisions and variations of that plan will continue to apply to the Loughmacask plan area.

From here in Kilkenny Borough and Kilkenny County Councils, will be collectively referred to as the Council.

4.1 Local Heritage, Landscape and Environment

The Loughmacask LAP area is underpinned by distinct local heritage and environmental attributes, both natural and cultural. The key challenge and opportunity for the Loughmacask LAP is to successfully form a new urban quarter, complementary to the city, which is characterised and enriched by the existing local heritage. The policies contained within the following sections set out to conserve, protect and enhance the existing local heritage, such that present and future communities may appreciate and benefit from it.

Habitats within the LAP area have been mapped according to the classification system recommended by the Heritage Council of Ireland.

4.1.1 Natural Heritage

The principal natural heritage resource within the LAP area is Lough Macask, a proposed Natural Heritage Area (pNHA), and thus protected under the Wildlife (Amendment) Act 2000. While other natural heritage elements, such as mature trees and hedgerows, do not have formal protection under legislation, they are nonetheless of significance and contribute towards the character of the area.

Bio-diversity is a measure of the quantity of species and habitat variety present within an eco-system. It is an important indicator of the extent to which natural processes are functioning and contributes in many ways to the development of communities and their culture. Therefore the conservation of biodiversity is important from economic, cultural and educational perspectives.

The LAP area is underlain by karst limestone, which is characteristic of geological features including underground springs, rivers and swallow holes. The geology of the area has significance in that it underpins the Lough Macask wetland.

Lough Macask is a pNHA of county importance comprising flora species unknown elsewhere in County Kilkenny.

Ecological habitats are more effective when connected together, forming a green network. This can be assisted by connecting areas of open space to the existing ecological resources within the LAP area to form ecological greenways.

The following policies set out the Council's longterm view with regard to protection, conservation and enhancement of the natural heritage resources within the LAP area. It is the Council policy to:

NH01 Conserve, protect and manage the existing natural heritage resources in a sustainable manner and to develop measures and provide conditions to enhance bio-diversity where possible.

NH02 Provide for the protection, conservation and enhancement of wildlife habitats and natural resources, including Lough Macask pNHA and features such as ecologically important hedgerows and mature trees within the LAP area.

NH03 Provide ecological linkages such as wetland habitat, hedgerow, meadow or woodland to connect the existing habitats of importance within the LAP area adjoining areas of ecological interest, such as the Breagagh Valley to the south, the rural agricultural hinterland to the west, and the Nore Valley to the east.

NH04 Establish areas of urban woodland planting that will provide shelter, bio-diversity and amenity, and will also assist in the effectiveness of using open space as ecological linkages.

05 Ensure that the requirements of the Wildlife (Amendment) Act 2000 in terms of the protection of flora species are complied with.

NH06 Protect and sustain the hydrological functioning of the LAP area and surrounds, particularly in relation to Lough Macask. The hydrology of the area has significance in that it underpins the Lough.

NH07 Ensure the protection and conservation and, where necessary, restoration and enhancement, of the quality and distinctiveness of geological and geomorphic systems, sites, and features that are deemed to be of hydrological and ecological importance.

NH08 The habitats of protected species (e.g. bats) should be preserved and if possible enhanced to increase their biodiversity value. Under the provisions of the Wildlife Acts bat roosts can only be destroyed under licence provided mitigation measures are implemented. Where protected species are roosting in buildings, the buildings should be retained or, if redeveloped, alternative roosts provided in a suitable location in close vicinity to the original location. The provision of alternative roosts must be supervised by a suitably qualified ecologist.

Council will use its planning powers to prevent the removal of trees, wild hedgerows and scrub during the nesting season (March 1st to August 31st).

Lough Macask pNHA

Lough Macask is classified as a reed and large sedge swamp (Heritage Classification FS1) and a eutrophic lake habitat (Heritage Classification FL5), protected under the Wildlife (Amendment) Act 2000. In order to provide for the long-term conservation of the Lough, part of the formulation of this strategy will require a study of the hydrological processes that underpin

the pNHA and the existing ecological features. An ecological survey to benchmark the existing biodiversity and ecological condition will also be required. It is envisaged that the strategy will examine how to create conditions for ecological enhancement, propose measures for management and monitoring, and outline proposals for the development of the pNHA as an educational and amenity resource.

Lough Macask pNHA has two connected basins, both of which have muddy substructures. The eastern basin supports extensive swamp vegetation (Heritage Classification FS1). Within this basin there is a large single Willow tree. Overall, the lake has diverse vegetation, which includes greater duckweed, a species not known to occur elsewhere in the county.

While showing characteristics of a turlough due to water fluctuations and to some extent the vegetation, there are no exposed karst features. Also the changes in water levels apparently occur at a relatively slow rate untypical of turloughs.

Fauna of interest, which occurs within proximity to Lough Macask, include snipe, mallard, teal, moorhen and grey heron The Common Frog has also been sighted.

Council propose complete the ongoing hydrological / hydrogeological studies, which will identify the processes and conditions pertinent to Lough Macask. The study may encompass lands outside the LAP area as necessary. In addition Council will carry out a detailed assessment of the ecology of the Loughmacask pNHA to include specialist botanical studies, where necessary, in order to identify ecological features and biodiversity of the pNHA.

Further to the above, Council will promote immediate measures for protection against the poaching of cattle, and nutrient enrichment. Subsequently, the Council will prepare a management strategy taking account of the hydrological and ecological functioning of the pNHA. The management strategy will typically include ecology and/or hydrological monitoring, development of Lough Macask as an amenity and educational resource and to ensure its protection and conservation.

Having regard to the above matters, it is Council Policy to:

NH09 Ensure that all developments proposed within or close to the pNHA avoid impact on the hydrological and ecological functioning of the pNHA and are referred to the National Parks and Wildlife Service for consideration and comment. In this regard the Planning Authority may request a developer to commission studies specifically designed to show the impact of a proposed development on the pNHA.

Kilcreen

Along the southern boundary of the LAP in Kilcreen is a small artificial pond (Heritage Classification FL8) of minor ecological interest. Measuring approximately 15 metres by 6 metres it can be described as being stagnant with a muddy substructure. Of note is a retaining wall and inlet, both of which exist along the southern side. Species present include watercress and common bent. Two large alder trees occur at the southern boundary of the pond.

Having regard to the above matters, it is Council Policy to:

NH10 Retain and enhance the Kilcreen pond as an ecological resource as part of any future development.

Hedgerows

Hedgerows (Heritage Classification WL1) of good quality, with an average height of between 6 and 7 meters are noted within the vicinity of Lough Macask pNHA. Hawthorn is the principal species and ivy is frequent. Further hedgerows of moderate quality exist to the northwest of Ayresfield House. Fig 12 identifies the hedgerows that are of importance from an ecological and landscape amenity perspective, some of which are of conservation value in a local context.

Fauna species associated with hedgerows in the LAP area include hedgerow bird, wren, song thrush, dunnock, coal tit, great tit and starling.

Having regard to the above matters, it is Council Policy to:

NH11 Treat ecologically significant hedgerows as ecological corridors and to provide for their retention and enhancement.

Ayresfield House

The grounds of Ayresfield House contain numerous trees typical of a parkland demesne landscape (Heritage Classification WD5). Throughout the trees, notable species include Lime, Beech and Horse Chestnut. Some of the trees are of considerable maturity and could be expected to support bat roosts.

In addition to the above, the Ayresfield House site also offers a unique opportunity to provide a pedestrian linkage between existing activities along Grange Road (such as existing schools) and the future village centre within the Loughmacask LAP area. Combined with the heritage value of the trees on site, the link would add to the overall qualities of the Loughmacask area.

Having regard to the above matters, it is Council Policy to:

NH12 Seek the retention of the existing trees on the grounds of Ayresfield House. The Council may request that a bat roost survey be undertaken prior to considering future applications for development or tree felling.

NH13 Provide pedestrian access through the Ayresfield House site between Grange Road and the future Loughmacask village centre.

4.1.2 Archaeological Heritage

It is important that present and future generations can experience and enjoy the physical expressions of the past. Architectural heritage refers to structures and features of artistic, architectural and/or historic interest within the Loughmacask LAP area. It can be described as a finite, non-renewable physical and material resource and provides an invaluable record of cultural evolution and change over time, thus providing insight into societies of the past.

The Loughmacask LAP area comprises archaeological heritage dating from the late Bronze Age, including six archaeological sites recorded in the Record of Monuments and Places (RMP). In addition to the information detailed below, further detail can be found in the relevant preliminary archaeological and architectural assessment contained within Appendix D to this LAP. It is noted that the site codes referred to in the following text are derived from the assessment referred to above.

Two areas within the Loughmacask LAP area hold particular interest in relation to their archaeological potential. The first area (described as AP1 in the preliminary archaeological and architectural assessment) is an area extending along the Bonnetstown Road to the south, to the border of the LAP area to the west and above Lough Macask to the north. The second site (described as AP2 in the preliminary archaeological and architectural assessment) extends from the Bishops Demesne in the north, to the Butts area in the east and to Kilcreen in the south.

If and when development occurs within areas AP1 and AP2, it is recommended to undertake a nonintrusive survey to inform the location of site specific archaeological test trenching, in advance of any proposed works.

Further to the above, particular sites of archaeological interest within the Loughmacask LAP area include:

Site Code*	Description	RMP No.
Site Code A1	Linear Ditch	KK019-023
Site Code A2	Possible Enclosure	
Site Code A3	Archaeological Complex	
	Ring Ditch	KK019-02201
	Ring Ditch	KK019-02202
	Ring Ditch	KK019-02203
	Linear Ditch	KK019-02204
Site Code A5	Enclosure	KK019-07

Sites listed in the above table should be avoided and/ or protected during construction. If these sites cannot be avoided, it is recommended to undertake an archaeological survey in advance of any development (carried out by a suitably qualified expert agreed upon by the Council). Other non-intrusive surveys are recommended in order to inform the location of site specific archaeological test trenching. Monitoring of all ground works within the area is recommended.

Sites that are located outside the LAP area but may be affected indirectly by any future development include:

Site Code*	Description	RMP No.
Site Code A4	Dwelling – Kilcreen Lodge	KK019-102
Site Code A6	Enclosure	KK019-08
Site Code A7	Holy Well	KK019-24
Site Code A8	City	KK019-026
Site Code A9	Ring fort	KK019-006

^{*}For maps showing the location of the sites, refer to Appendix D, Preliminary Archaeological & Architectural Assessment, figures 1 to 3.

It is Council Policy to:

AH01 Preserve and maintain the archaeological heritage and to safeguard the integrity and setting of recorded sites where possible.

AH02 Ensure that full consideration is given to the protection of the archaeological heritage when undertaking, approving or authorising development

AH03 Ensure that all significant development proposals within proximity to sites specified in the Recorded of Monuments and Places be referred to all relevant prescribed bodies.

AH04 Ensure when planning to undertake development or when considering the authorisation of development that the following procedures are applied:

- Pre-application consultations in relation to archaeological heritage;
- That a presumption in favour of preservation in situ of archaeological remains and settings, in accordance with Government policy; and
- Where deemed necessary, by either County and Borough Councils, an archaeological impact assessment of the proposed development be carried out at the design stage.

Where an archaeological impact assessment indicates the necessity for further investigation, the Planning Authority may require at the developers expense:

- Site investigations using trial trenches or excavation; and/or
- Alternations to the proposed design to mitigate the impact on the archaeological heritage and/or to facilitate its presentation to the public.

AH05 When deciding whether or not to grant permission for development, the Planning Authority may impose conditions in relation to:

- A requirement to carry out further archaeological monitoring and/or excavation;
- Require specific alteration to the design of the development arising from any archaeological assessment undertaken; and/or
- Require the planning authority's consent to the construction programme and the design and layout of the construction site, where deemed necessary.

4.1.3 Architectural Heritage

Architectural heritage comprises of locally important building and settlement typologies such as houses constructed in the vernacular style. In particular, the LAP area is characterised by features of architectural heritage interest post dating from the 1700's.

Sites of Architectural Heritage interest within the Loughmacask LAP area include:

Site Code*	Description
Site Code AH1	Terraced Cottages
Site Code AH2	Vernacular Dwelling
Site Code AH3	Architectural Remains
Site Code AH5	Vernacular Dwelling
Site Code AH6	Vernacular Dwelling
Site Code AH7	Farm Complex
Site Code AH8	Vernacular Dwelling
Site Code AH9	Possible architectural complex

^{*}For maps showing the location of the sites, refer to Appendix D Preliminary Archaeological & Architectural Assessment, figures 1 to 3.

To uphold the existing heritage value of the Loughmacask LAP area, prior to development taking place over any of the above listed sites, an assessment of the architectural heritage value of the built form on the site should be carried out by a suitably qualified expert agreed upon by the Council.

Where any built form is found to have significant architectural heritage value, destruction and/or damage to that built form should be avoided and development proposed should seek retain and, where possible, enhance its heritage value.

Sites that are located outside the LAP area but may be affected indirectly by any future development include:

Site Code	Description
Site Code AH4	Farm Complex
Site Code AH10	Possible Architectural Complex
Site Code AH11	Vernacular Dwelling
Site Code AH12	Village
Site Code AH13	Country House

^{*}For maps showing the location of the sites, refer to Appendix D, Preliminary Archaeological & Architectural Assessment, figures 1 to 3.

It is Council Policy:

AH06 To preserve and protect the structure and curtilage of Kilcreen Lodge, which, located on the boundary of the LAP area, is contained in the Record of Protected Structures. To ensure that all significant development proposals relating to the Kilcreen Lodge or its setting be referred to the all relevant prescribed bodies and to ensure that full consideration is given to the protection of the architectural heritage when approving or undertaking development.

AH07 Where possible, to retain and protect the stone walls along Loushybush Lane, while also allowing for the future development of the IRR and surrounding pedestrian and cycle networks. Where removal of the wall is required, stone material shall be reutilised for future walls and similar built form within close vicinity of Loushybush Lane.

AH08 That where a site is listed within this LAP as having architectural heritage interest, an assessment of the architectural heritage value of the built form on the site shall be carried out by

a suitably qualified expert agreed upon by the Council. The cost of any such assessment shall be at the cost of the developer.

AH09 To protect (through the prevention of demolition, loss or damage) and, where possible, preserve and restore, walls, buildings and other built forms, that are found to be of significant architectural heritage value.

4.1.4 Place Names

Places names offer a rich historical insight into places and, often, key physical features. Accordingly, it is Council Policy to:

PN01 Ensure that existing place names be utilised in the naming of new developments in the LAP area and that all place name proposals for new developments are referred to the Placenames Commission, the Government advisory body on policy matters relating to Irish-language placenames.

PN02 In granting permission Council may attach conditions in relation to the naming of new housing and mixed-use developments, streets, roads and public spaces.

4.1.5 Public Open Space

As part of the open spaces strategy it is the Councils vision to develop a public park within the LAP lands to include Lough Macask and, potentially, another over the lands zoned open space to the southeast of the LAP lands adjacent to the Fr. Mc Grath centre. Both areas are located on lands which are zoned as public open space.

It is Council policy to:

OS01 Develop Lough Macask as an environmental park.

OSO2 Develop the lands zoned open space to the south-east of the LAP lands adjacent to the Butts for active recreation and/or community purposes in response to the needs identified locally in consultation with the local community.

4.1.5 Landscape Views

Located in close proximity to Kilkenny City and adjoining rural lands, the Loughmacask LAP area has the potential to retain views into and out of the site that will assist in retaining and enhancing its distinct character.

By way of example, the Loughmacask LAP area affords good views of St Mary's and St Canice's cathedrals'. The incorporation of such views, either through established view corridors or from key buildings and places, has the potential to strengthen the areas relationship with Kilkenny City and the surrounding environs. The recognition of such connections also has the potential to assist in developing a built environment is engrained with cultural meaning, both for locals and visitors to the area, now and in the future.

Having regard to the above discussion, it is Council policy that:

LV01 Where the Council believes development has potential to either diminish or enhance significant views into and/or out of the Loughmacask LAP area, it may require that a visual assessment be carried out prior to development being undertaken on any site.

LV02 Where any assessment of significant views into and/or out of the Loughmacask LAP area shows that proposed development has the potential to significantly diminish or enhance such views, the Council may require the developer to amend its development proposal to ensure that an optimal outcome is achieved for the wider benefit of the community.

4.2 Transportation and Services Infrastructure

Fundamental to any community is reliable transportation and services infrastructure. Aimed at achieving the Councils' vision for the Loughmacask LAP area, this section outlines policy in regard to community infrastructure, including:

- Pedestrian, cycle and road ways
- Public Transport and Traffic Management
- Water Supply
- Waste Water
- Surface Water
- Energy
- Telecoms/Information Technology

4.2.1 Infrastructure

The Inner Relief Road (IRR) will act as a distributor road for the area and a relief road for the city. In order to allow for development of the area to proceed, protect the function of the IRR as a relief road and minimise severance it is envisaged that restrictions on the movement of traffic may be placed at various locations, which may include:

- Minimising the number of access road junctions on the IRR.
- Access to the lands to be predominantly via the IRR.
- Ensuring that generally no direct access to individual houses will be allowed from the IRR.
- Restricting access to improve road safety around the existing and proposed school.

The detail of these restrictions will be addressed at the detailed design stage of the individual developments.

Importantly, the IRR alignment will have to take account of the proximity of the Loughmacask and its associated hydrology.

Each development will have to take care to ensure pedestrian and cyclist safety, both actual and perceived, in accordance with DOEHLG Design Guide Traffic Management Guidelines. Pedestrian pathways and cycle-ways shall link the development area, Loughmacask and the City. The IRR will be designed to minimise severance between the Western Environs, the city centre and the LAP area, allowing safe crossing of the road by pedestrians and cyclists.

With regard to the above matters, it is Council Policy that:

IP01 In the interest of road safety Council will require the estate roads will be traffic calmed/low speed throughout with speed limits of 30mph. The design will be in accordance with DOEHLG Design Guide Traffic Management Guidelines.

IPO2 A 'walking bus' scheme (a group of children who make their way to and from school on foot, supervised by participating adults) for the school going population of Kilkenny city and environs be facilitated, with assistance from Council.

IPO3 A cycling and pedestrian movement network throughout the plan area, which will be integrated in a sustainable manner with future residential developments and adjoining city areas.

4.2.2 Public Transport and Traffic Management

The traffic management policy of this LAP recognises the varying future needs of the Loughmacask area, such as peak time traffic, shopping and business and delivery services. Transportation policies will be vital to ensure that the LAP area will grow and develop in a sustainable manner. The creation of connected transport modes is critical in linking the plan area to the inner city and wider hinterland.

The standards laid out in the DOEHLG Design Guide Traffic Management Guidelines, shall be incorporated as an integral design element, in the development of internal roads. Particular attention shall be given to the following:

- General traffic calming measures
- Access facilities for Mobility Impaired People and other vulnerable road users
- Reduction of the dominance of the motorised vehicles

The following are the County and Borough Councils policy objective regarding public transport and traffic management:

It is Council Policy to:

PTO1 Promote interconnectivity between all modes of transport (vehicular, pedestrian, cycle and public transport) in order to link the LAP area with the city and its wider city networks.

PTO2 Improve the efficiency, performance and attractiveness of transport facilities through provision of an integrated traffic management network which will offer wider benefits throughout the LAP, the city and environs areas.

PT03 Facilitate a sustainable movement network throughout the Loughmacask area that will encourage walking and cycling in place of the motorcar.

4.2.3 Water Supply

Plans for the long term upgrade of water supplies in the city will be available shortly in the coming year.

It is Council Policy to:

WS01 Encourage the adoption of water saving measures throughout future development. This will increase the extent of development capable of being serviced by the existing water treatment plant. Such measures would include:

- Water butts to collect rainwater
- Low flush and dual flush toilets
- Low water use appliances
- Rainwater harvesting
- Greywater recycling

4.2.4 Waste Water

Separate foul and surface water drainage will be required throughout the plan area. The proposed sewer network is illustrated within figure 37 of this LAP.

It is Council Policy to:

WW01 Actively encourage the separation and reduction of wastes at source to reduce the overall load on the municipal waste water treatment plant at Purcellsinch.

4.2.5 Surface Water

It is important that the area's hydrology and geology, be understood in the overall context of the Loughmacask before a surface water policy can be fully completed. A study of the Loughmacask pNHA will inform the formulation of the surface water policy to ensure that its existing hydrology is maintained.

The Breagagh River flows along but outside the southern boundary of the LAP area. The southern portion of the LAP area forms part of the Breagagh catchment area.

It is envisaged that areas within the Breagagh catchment (pending the hydrology study of Loughmacask pNHA) will be drained to the river. A network of surface water sewers will be constructed to carry surface water run-off to the Breagagh.

SW01 It is the County and Borough Councils policy objective to implement SUDS (Sustainable Urban Drainage Systems) as the preferred solution for the disposal and treatment of surface water run-off for all proposed developments.

New developments will be required to adhere to the principles of Sustainable Urban Drainage. In the design of new developments consideration should be given to incorporating some of the following measures.

- On site water ponds to store and/or attenuate additional runoff from the development should be provided
- Soak-aways or French drains should be provided to increase infiltration and minimise additional runoff
- Surface water run-off should be passed through a litter screen and petrol/oil interceptor before discharged off site to watercourses.

Attenuation measures should be designed such that the SUDS features will not overflow during a 30-year return period rainfall event. Overflow from the attenuation measures is to be retained within the site area up to the 100 year event.

SW02 The County and Borough Councils will seek to promote the sustainable use, management and disposal of water. The County and Borough Councils shall encourage the use of alternative techniques for the conservation, treatment, collection and disposal of surface and waste water.

SW03 It is a policy that any development that is sensitive to the effects of flooding will generally not be permitted in flood prone or marginal areas.

SW04 It will be Council policy to discourage the culverting of existing streams and open drains. Where culverts are deemed necessary - the minimum permissible culvert diameter shall be 900mm and access should be provided for maintenance as appropriate.

SW05 For developments adjacent to watercourses of a significant conveyance capacity any the following considerations will be addressed in the drainage design:

- All watercourses shall be maintained in their original, open and natural channel. There should be no interference with or widening of watercourses without prior consultation with the Office of public Works. Developments in the vicinity of watercourses should not alter the existing line of the watercourse.
- All developments maintain a buffer zone of at least 5 metres (19 metres in case of the Breagagh River) from the riverbank along the length of the watercourse allow access for channel clearing/ maintenance.
- There must be no infilling within the buffer zone.
- Conservation of bank-side vegetation.
- There shall be no discharge of suspended solids or any other deleterious matter to watercourses during the construction phase and during any landscaping works. Particular care should be taken when using concrete or cement near watercourses.
- Fuels, oils, greases and hydraulic fluids must be stored in bunded compounds, well away from the watercourse. Refuelling of machinery must be carried out in bunded areas.
- Adequate grease traps should be installed.
- All surface waters from sites and access roads should be channelled through adequately sized petrol/oil interceptors and be subject to attenuation prior to discharge to the watercourse.
- All fuel and oil tanks must be adequately bunded.

SW06 All new development must be designed and constructed to meet the following minimum flood design standards:

For development in general - the 100 year flood

SW07 Flood impact assessment and proposals for the storage or attenuation of run/off discharges (including foul drains) must accompany applications for planning permission for development of areas exceeding 1 hectare and development in areas of identified flood risk to ensure the development does not increase the flood risk in the relevant catchment.

The drainage strategy should include but not necessarily be limited to the following:

- An indication of the types of sustainable urban drainage techniques to be used;
- Take into account possible future development;
- Design calculations showing the attenuation required to ensure that post-development runoff volume does not exceed that for the critical rainfall events;
- Evidence of sub-soil porosity where infiltration techniques are to be used;
- Pre and post-development surface water runoff calculations;
- Assessment of flood risk where this is deemed appropriate;
- Proposals for integrating the drainage into the general landscape and the open space requirements for the development;
- A description of the design safety features to render the proposed attenuation systems safe;
- Demonstration of good environmental and ecological practices;
- Indicate proposed sediment control techniques are to be used;
- Identify the maintenance requirements of the proposed drainage system and the proposed management regime to oversee the maintenance;
- Indicate flow measurement and telemetric provisions to be used:
- A method statement detailing how contaminated water arising during construction will be dealt with;
- Identify drainage to be taken in charge by the local authority and provide details of construction for same.

A certificate or report from a competent person(s) that the development will not contribute to flooding within the relevant catchment must accompany all drainage impact assessments.

4.2.6 Energy

The recently published Government White Paper entitled Delivering a Sustainable Energy Future for Ireland 2007-2020 and the National Climate Change Strategy 2007-2012 commit the Government to reviewing the Building Regulations with the aim of reducing energy demand by 40% relative to current standards. In addition, the Government is committed to providing 15% of electricity consumed from renewable sources by 2010 and 33% by 2020. The Council is committed to these targets.

Guidance and assistance on these and other matters pertaining to the sustainable use of energy is available from Sustainable Energy Ireland (SEI) and the Carlow Kilkenny Energy Agency. The Department Guidelines on Quality Housing for Sustainable Communities (2007) set out how sustainable energy considerations should be incorporated into all stages of the design process. These are outlined within the County Development Plan.

It is Council policy that:

EP01 All development shall be undertaken with the aim of meeting Government standards and in accordance with the relevant provisions of the County Development Plan (including assessment against any relevant Sustainability Checklist). In particular, the design of any building should consider the following:

- Site layout and associated bio-climatic/passive solar design measures
- Enhanced levels of insulation in walls, floors, glazing and doors
- Reduced uncontrolled air infiltration losses
- Use of healthy and controllable ventilation systems
- Heat recovery systems

- Use of daylight
- Water conservation measures
- More sustainable building materials
- Improved heat generation appliance efficiency, e.g. condensing boilers
- Intelligent heating system configuration and time/temperature/zone/function controls
- Efficient provision of domestic hot water
- Fuel switching to low or zero CO2 emitting fuels
- Energy efficient lighting systems
- Incorporation of renewable energy systems e.g. active solar, heat pumps, biomass
- Provision of appropriate group or district heating systems.

4.2.7 Telecoms/Information Technology

Cabling for broadband and television must be provided underground to serve all residential and commercial development.

IT01 It is the Council's policy to promote access to and help develop information and telecommunication technology, including broadband in order to facilitate working from home, entertainment, education and business development. Cabling for broadband and television must be provided underground to serve all residential and commercial development.

4.2.8 Waste Management

It is the Council Policy to:

WM01 Seek the provision of a collection point for recycling as part of the Village Centre development.

WM02 To require the preparation of Integrated Waste Management Plans for large scale residential and commercial developments. The purpose of the Integrated Waste Management Plan will be:

- Reducing the quantity of waste arising from development
- Minimising the energy expended in recycling waste and removing waste off site.
- Ensuring waste is being removed to appropriately licenced facilities.

4.3 Social infrastructure

4.3.1 Social Sustainability

It is the intention that the Loughmacask LAP area will develop to become a socially cohesive, balanced community where all future residential developments will incorporate a mix and balance in unit size, type and tenure. Therefore it is important that residential units will vary in both size and type to accommodate single people, families and children and older people.

Affordable housing and social cohesion are vital for continued social, economic and cultural development. This LAP adopts a policy objective consistent to that of the Kilkenny County Council and Corporation Housing Strategy (2001), for social and affordable housing. It is considered appropriate that emphasis be made on participation of key advisory groups during the pre-design stage of all new development to ensure that the needs of families and children are meet in terms of unit size and open space.

It is a policy of Council to:

SS01 Promote social inclusion. Council will require that all residential developments consist of a mix of unit types and sizes and that all developments incorporate social and affordable housing units as required under Part V of the Planning and Development Acts (2000 and 2002) and the Kilkenny Housing Strategy including the provision of sheltered housing for the elderly.

SS02 Ensure the principles of universal accessibility are adhered to in the design of community facilities, commercial buildings and apartment buildings

4.3.2 Community Facilities

Location of accessible recreational space, suited to the needs of varying ages and abilities within Loughmacask will enhance the identity of a well-connected, developed and integrated local area.

Sports, such as hurling, soccer, camogie, handball and basketball, have traditionally played a strong role in the community identity and structure in Kilkenny.

Meeting the educational needs of the future population has been taken into account in the LAP. It has been predicted that one primary school will be required to accommodate the future school going population of Kilkenny City and Loughmacask.

However, the LAP does recognise the importance of going beyond education and sporting requirements. Varied needs will have to be catered for, in order to encompass the wider community, cultural and social demands of the existing and future population of Loughmacask.

Accordingly, it is Council policy:

CF01 To facilitate the educational needs of the future primary school going population of Kilkenny City and Environs by providing a suitable site for development of a new school and/or and expanding an existing school site.

CF02 To ensure childcare facilities be provided in all major residential and mixed-use developments. The design of all childcare facilities will have regard to the Childcare Facilities, Guidelines for Planning Authorities, June 2001.

The Council will require the provision of a minimum of 20 childcare places for every 75 new residential units. The Councils will operate this requirement in a flexible manner and, where possible, will encourage and facilitate cooperation between developers to jointly provide facilities, having regard to the Kilkenny County Childcare Strategy.

CF03 The Council will support the provision of childcare facilities in schools and in association with other community and recreational facilities such as sports clubs.

4.3.3 Local Economy

Grasslands Fertilisers is currently the only employment provider located within the Loughmacask LAP boundary. As a well-established firm, it has played a significant role towards the economic performance of Kilkenny City for over 50 years.

Loughmacask is within close walking proximity to the city centre, however it is envisaged that some form of small-scale retail facilities and services will be catered for within the LAP area. This will enable the area to develop as a vital and viable centre whilst maintaining an identifiable and individual yet complementary nucleus to Kilkenny City.

Having regard to the above, it is Council policy:

LE01 To provide local retail services within Loughmacask to cater for the typical daily needs of the local population.

LEO2 That self contained employment use space be provided as part of any future development of the Village Centre.

LE03 That home based employment be permitted in residential areas where it can be demonstrated that the employment activity will not have adverse impacts on residential amenity, such as may be caused by significantly increased traffic volumes, deliveries from heavy goods vehicles, noise or air emissions.

4.3.4 Recreation: Sport and Public Parks, Tourism

It is important that provision be made for the necessary active and passive recreational facilities to sustain a high quality of life for the local community. In addition to the provision of additional facilitates, the existing environmental resources and natural amenity of the Loughmacask LAP area can be used to provide a high quality leisure environment.

Enhancing the natural and physical connections and linkages with Kilkenny City is vital to the LAP. These include the integration of existing recreational and leisure links, and maximising use of tourist amenities and routes. The development of recreational walking and cycling routes within the study area to connect the river Nore walking trail to the Breagagh River by means of a linear park and green-route system in the Loughmacask area

Park facilities should encompass existing views and build upon the existing landscape attributes in order to enhance the area's identity.

It is Council policy to:

RP01 Ensure the timely provision of community facilities be made concurrent with the early phases of new residential development.

RP02 Ensure the provision of play facilities for younger children be made prior to the occupation of new residential developments.

RP03 Ensure the provision of an active and passive recreational space be made prior to the occupation of new residential developments.

RP04 All weather recreational facilities with lighting such as multi-use games areas (MUGAs) be provided in residential developments.

4.4 Urban Design

The purpose of the following urban design policy is to assist in facilitating the Councils' vision for the Loughmacask LAP area.

Sustainability has emerged as a guiding paradigm to create a new kind of built environment, one that meets the needs of present communities without compromising the ability of future generations to meet their own needs. Through the responsible development of our built environments, we can live more sustainably than we do now. We can be more productive with our natural resources and land, and reduce our impact on the natural environment, while improving the social and economic wellbeing of our communities. The guidelines set out for Loughmacask will facilitate sustainable design of the built environment that provides a balanced solution, offering optimum working/living conditions, alongside a reduced environmental impact.

The quality of landscape and open space within a community is also vital to its wellbeing. The provision of private open space that provides for the needs of a diverse range of people and groups is necessary in conjunction with all types of living environments. Public open space has the potential to provide a variety of benefits to a community, ranging from enhanced aesthetic and biodiversity qualities, through to social and cultural venues that provide opportunities for a range of community events.

While looking to provide such benefits to the community, it is also necessary to ensure that the intrinsic landscape values of the Loughmacask area are retained, as such qualities will assist in creating a future living environment that remains meaningful to its residents and visitors.

Fundamental to a vibrant and healthy community is permeability and access. Green networks, such as pedestrian and cycle routes have the potential to provide for a variety of community uses, including circulation, connectivity (within and beyond the Loughmacask LAP area), enhanced biodiversity, and increased community health. Equally important is careful design of the street network and parking

areas, which have a high influence on the safety and aesthetics within a community. Accordingly, careful and integrated design of such networks is essential to ensure a quality environment.

Having regard to the above matters, it is the Councils' policy that:

UD01 Future development within the Loughmacask LAP area shall be undertaken in a manner that seeks to incorporate best practice urban design and infrastructure principles into all facets of design, such that it assists in the sustainable environmental, social and cultural growth of the Loughmacask community into the future.

In particular, development within the Loughmacask LAP area shall have due regard to the relevant urban design and infrastructure guidelines that from part of this LAP.

UD02 Parcels A and D must be dealt with as one single planning application addressing, inter alia, the following issues:

- (a) the overall development of the village centre in its entirety;
- (b) the contemporaneous delivery of the village centre with parcel A;
- (c) the delivery of parcel D in sequence after parcel A; and
- (d) delivery of the requirements set out in the Infrastructure and Use Matrix.

4.5 National and Councty Policy Context

In addition to the above policies, future development within the Loughmacask LAP area should be informed by national and county policy. Below are listed relevant policy documents that developers and landowners should consult, with checkmarks indicating to which aspect of development the policies are most relevant.

National	Natural Environment	Built Environment	Cultural Environment	Infrastructure	Local Resources
Planning & Development Act, 2000	/	/	1		
Planning and Development Regulations, 2001	/				
National Spatial Strategy, 2002	/	/		/	/
Regional Planning Guidelines for South East Region	✓	✓		✓	✓
National Development Plan, 2007-2013	✓	/	/	✓	1
Sustainable Development: A Strategy for Ireland, 1997	✓	✓		✓	
Residential Density Guidelines, 1999		/			1
Retail Planning Guidelines, 2005					1
Childcare Facilities Guidelines, 2001					
Building Regulations		/			
Architectural Heritage Protection Guidelines, 2004	✓		✓		
Quality Housing for Sustainable Communities, 2007		/			
Traffic Management Guidelines, 2003		1		/	
Sustainable Urban Housing: Design Standards for Apartments, 2007		/			
County	Natural Environment	Built Environment	Cultural Environment	Infrastructure	Local Resources
Kilkenny City and Environs Development Plan, 2002-2008	✓	✓	✓	✓	✓
Draft Kilkenny City and Environs Develop- ment Plan, 2008-2014	✓	✓	✓	✓	/
Kilkenny Housing Strategy, 2001	/	1			
Open Space and Recreation Study	/	1			/
Joint Waste Management Plan for the South East Region, 2006-2011	✓	✓		✓	
Kilkenny Economic, Social and Cultural Strategy, 2002			✓	✓	1
National Inventory of Architectural Heritage (NIAH) for Co. Kilkenny	✓		✓		