

LOUGHMACASK

MASTERPLAN

A distinctive and new residential City Quarter, physically and culturally connected to the historic City of Kilkenny and its surrounding landscape.

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Dr RN Chkd JK



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St. Mary's Cathedral



View from Butt's Green towards St. Mary's Cathedral

1.0 INTRODUCTION

Kilkenny City is at the heart of Medieval Ireland and is the largest urban centre of County Kilkenny. It is the only inland urban settlement that is designated as a city – a title it has enjoyed since 1609.

Kilkenny dates back to the 6th century having established originally on the western side of the Nore River and south of the Breagh River. The city centre is compact, distinctive for its busy narrow streets and laneways that reflect its medieval origins, the river setting, and the many historic buildings that are intrinsic parts of the identity of the City.

The city has evolved over time and the settlement and growth pattern is readily apparent with expansion principally to the east, south and west with supporting national and local road infrastructure. Kilkenny is served by rail with MacDonagh Station on the eastern side of the River Nore on the mainline Dublin to Waterford line.

Loughmacask is to the northwest of the city, immediately north of the River Breagh and either side of the Tullaroan Road. The lands are substantially undeveloped and are within 300m of Irishtown at the north end of the city that leads directly to Parliament Street and High Street in the city centre.

Loughmacask is exceptionally well positioned to provide a new residential urban quarter at Kilkenny where its community can enjoy the benefits of a high quality living environment.



Fig. 1.1 Kilkenny City and Loughmacask Context

Key

— Loughmacask Masterplan Boundary

1.0 INTRODUCTION

1.1 Public Consultation and Engagement

A public consultation event was held January 20th 2020 at the Dicksboro GAA Club, and attended by approximately 70 stakeholders. The following provides an overview of the ideas expressed by attendees under a number of themes:

Landscape and Environment

- Conserve existing mature woodland area
- Potential for looped walking routes to and from the Nore Valley and River Breagagh Valley
- Retain views towards city landmarks
- Preserve the character of Loughmacask area as much as possible
- Noted flooding extents of Lough Macask east of Lousybush Lane.
- Concern regarding flooding in River Breagagh and impact on potential development areas

Land Use

- Consider potential impact on the Water Barracks area and existing community
- Provide retirement/assisted living for multi-generational cohorts
- Provide additional playing fields to accommodate city wide capacity issue
- Provide a Primary School
- Provide a Local Centre
- Lack of recreational facilities such as play grounds/play area locally
- Consider Grasslands Factory site, and the potential rezoning as part of Loughmacask
- Noted 2 no. 10 year planning permissions (expire April 2023)
- Consideration towards future expansion north and west of masterplan area
- Opportunity to include Strategic Reserve Lands as part of masterplan with new northern neighbourhood centre in addition to masterplan local centre
- Restrict industrial development expanding
- Phasing strategy to account for consented schemes

Access and Movement

- Make Lousybush Lane a pedestrian /cycle only route/path
- Provide a pedestrian crossing over River Breagagh
- Provide dedicated, segregated ped/cycle links throughout and linking houses, schools, sports facilities to local and new on site facilities and to the City
- Congestion/unsafe access issues to Fr. McGrath Centre
- Provide traffic free school zones
- Lack of access to existing areas of value. Provide links between environmental assets

Amenity

- Provide amenity uses in the River Breagagh Valley
- Provide looped walking trails to connect the Nore Valley, Lough Macask pNHA, River Breagagh Valley and Breagagh Valley neighbourhood
- Small park around Lough Macask welcomed

Community and Social Facilities

- Provide new sports club/all-weather pitches with public access (not only for school or sports clubs)
- Provide community gardens/allotments
- Opportunity to co-locate community, amenity and education facilities
- Capacity issues for existing community centres and sporting facilities
- Retain meteorological station as an educational facility

Public Transport

- Provide a Park and Ride facility
- Provide public transport links between site, Breagagh Valley neighbourhood and city
- Provide a bus route with safe stop off points, particularly for schools

Traffic and Infrastructure

- Consider Central Access Scheme route and opportunities for realignment
- Poor pedestrian realm on Dunningstown Road and Granges Road - lighting footpath quality etc.
- HGV volumes on Tullaroan Road and Granges Road is an issue
- Ensure infrastructure delivery comes before CBS secondary school delivery
- Ensure vehicular access to existing residential off Lousybush Lane (north) is provided
- All residential roads should have speed calming and segregated safe cycle lanes for children. Safety is paramount
- Ensure no vehicular route crossing over Dunningstown Road
- Consider a 1 way looped vehicular route between Granges Road (Pembroke Dev.), CBS secondary school site and Loughmacask
- Granges Road heavily congested due to no. of schools
- Lighting and footpaths between masterplan area and Hillcrest development
- Irish Water agreement to deliver approved location of surface water and foul sewer pipelines to service consented 10 yr. applications

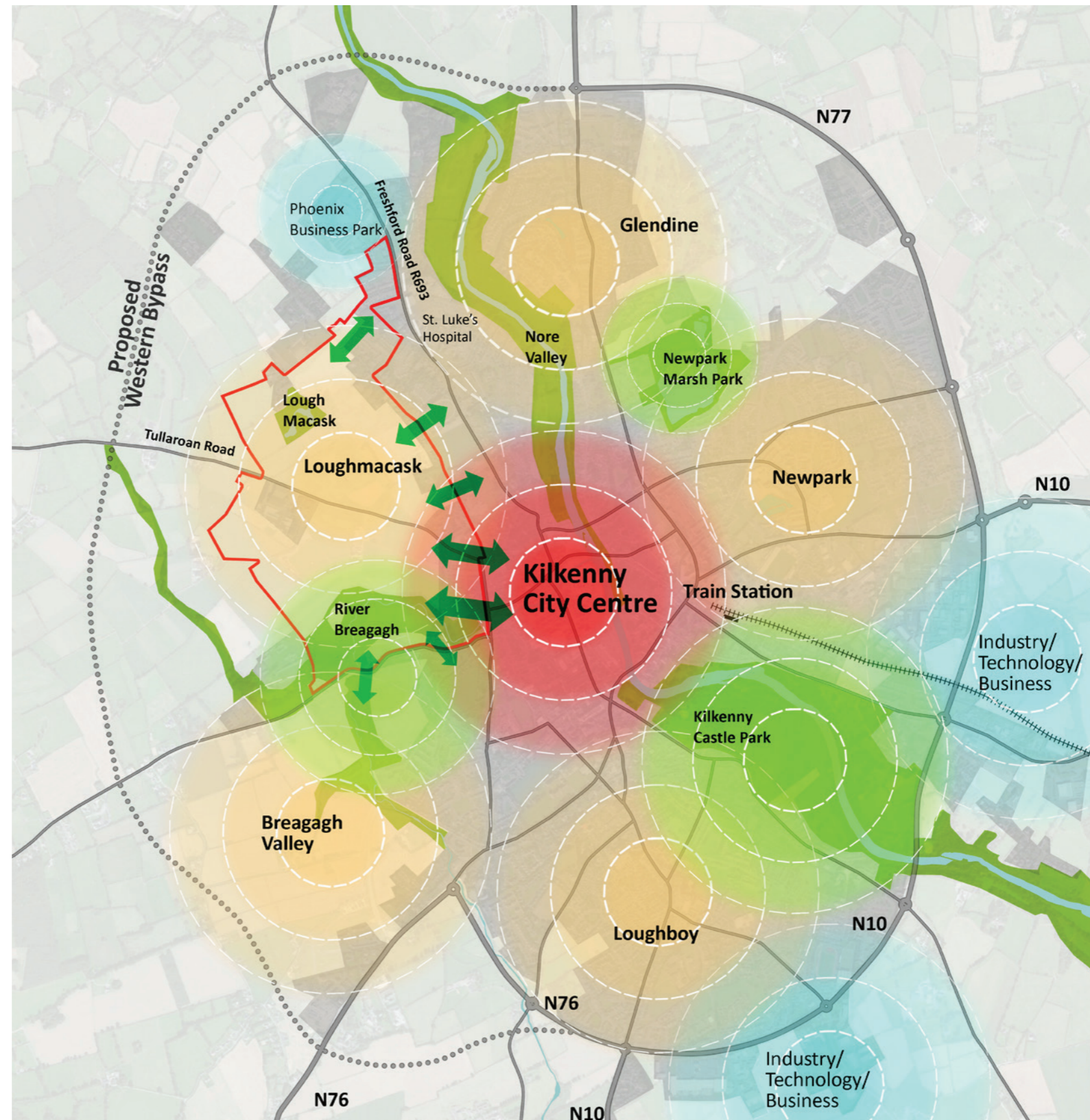
Drawing on the discussion with, and consultation contributions from, the community, the Vision for Loughmacask was distilled (as per overleaf) to inform and guide the future strategy for these lands.



2.0 VISION

Loughmacask will be an exemplar and plan-led new residential quarter of Kilkenny City, characterised by sustainable mobility connecting people to high quality housing, local facilities and amenities and the city centre and set within a distinctive landscape and historic city context.

- Distinctive and vibrant neighbourhood, building on the existing locality and communities and providing an excellent quality of life with urban and rural amenities.
- A walkable urban quarter with day-to-day facilities and amenities within a 10 minute walk or cycle of homes - reducing private transport dependency and strengthening local communities.
- A new urban quarter that expands on and is integrated with the historic city centre as well as the natural landscape of the Nore and Breagagh river corridors.
- Excellent provision of open space, green networks and local facilities that cater for local need, foster community growth and support health and well-being.
- Responds to climate change, through sustainable transport, energy efficient building technologies, and a strong green infrastructure network including sustainable drainage (SuDS) utilising soakaways, swales, infiltration trenches, ponds and wetlands where feasible, to assist with flood management.



Key
— Loughmacask Masterplan Boundary

Fig. 2.1 Loughmacask - Connected New Urban Quarter



St. Canice's Cathedral

St. Mary's Cathedral

View along Lousybush Lane looking South-East

3.0 STRATEGIC PLANNING CONTEXT

This Masterplan aligns with a hierarchy of National, Regional, and Local planning strategies and policies

The National Planning Framework (NPF)

Project Ireland 2040 is the Government’s overarching planning and development policy for the country to 2040. It constitutes a “strategy to make Ireland a better country for all of its people” by setting public investment policy at a high level. It comprises two documents: the National Planning Framework (NPF), which details the strategy for development to 2040; and the National Development Plan (NDP), which outlines the public expenditure required to implement this strategy and identifies priority future projects.

The NPF is a framework to guide public and private investment to create and promote opportunities, and to protect and enhance the environment. At its core are ten National Strategic Outcomes (NSOs), “a shared set of goals for every community across the country” (p. 10), which the plan aims to deliver:

- Compact Growth
- Enhanced Regional Accessibility
- Strengthened Rural Economies and Communities
- Sustainable Mobility
- A Strong Economy, supported by Enterprise, Innovation and Skills
- High-quality International Connectivity
- Enhanced Amenity and Heritage
- Transition to a Low Carbon and Climate Resilient Society
- Sustainable Management of Water and other Environmental Resources
- Access to Quality Childcare, Education and Health Services

The Regional Spatial and Economic Strategy (RSES)

There are three administrative Regions in Ireland: the Northern and Western Region, the Southern Region, and the Eastern and Midland Region. Under national policy, Regional Assemblies are tasked with drafting Regional Spatial and Economic Strategies (RSESs), which effectively set the agenda for implementing the national level development policy – the NPF – at the Regional level. The Masterplan area is situated in the Southern Region and, therefore, falls under the remit of the Southern RSES.

The RSES Vision is to make the Southern Region one of Europe’s most creative, innovative, greenest and liveable regions, with planned growth and development in suitable locations that nurtures places to realise their full potential, protects and enhances the environment, and delivers quality of life and economic growth.

Kilkenny City & County Development Plan 2021 – 2027

The Kilkenny City & County Development Plan 2021 – 2027 (‘the Development Plan’ hereafter) was adopted on the 3rd of September 2021, and came into effect on the 15th of October 2021. It sets out the Council’s policies and objectives for the proper planning and sustainable development of Kilkenny City and County to 2027.

The Core Strategy of the Development Plan provides an evidence-based rationale for the settlement hierarchy for Kilkenny City and County. Its strategic aim is “To implement the provisions of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) and to promote the compact growth of Kilkenny City [...] [and] the other settlements in the hierarchy and to strengthen rural economies and communities through growth and development of rural areas.” (Volume 1, p. 29)

Objective 4B is to “ensure growth is achieved in a compact form, with 40% of the projected growth of the County to be delivered in Kilkenny City and the towns and villages within the county” (Volume 1, p.32). Kilkenny City is at the top of the settlement hierarchy for the County, being designated as the only ‘Significant Key Town’. Under the Government’s NPF and the Southern Regional Assembly’s RSES, a population growth target of 30% to 2040 is set out for Kilkenny City. The Development Plan has formalised this target through **Objective 4G**, “To achieve a growth of more than 30% in population for Kilkenny City from 2016 to 2040 to 34,500, subject to capacity analysis and sustainable criteria under Section 3.3 of the RSES.” (Volume 1, p. 35)

The Core Strategy aims to deliver 30% of this new housing within the existing built-up footprint (i.e. within the CSO city boundary), with the remainder to be accommodated on the periphery, in the Breaghagh Valley and Loughmacask areas, both of which have been subject to Local Area Plans in the past.

In relation to housing, the strategic aim of the Development Plan is “To develop and support vibrant sustainable communities in an attractive living and working environment where people can live, work and enjoy a high quality of life, with access to a wide range of community facilities and amenities, while ensuring coordinated investment in infrastructure that will support economic competitiveness” (Volume 1, p. 74). This is reflected in **Objective 6A**, “To ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being” (Volume 1, p. 75).

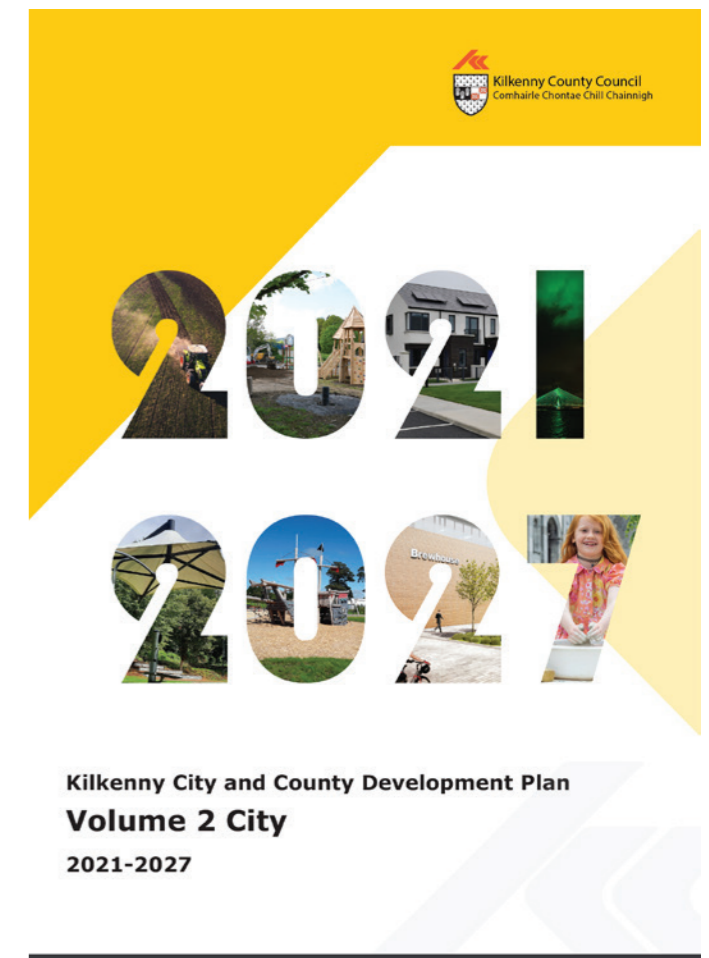
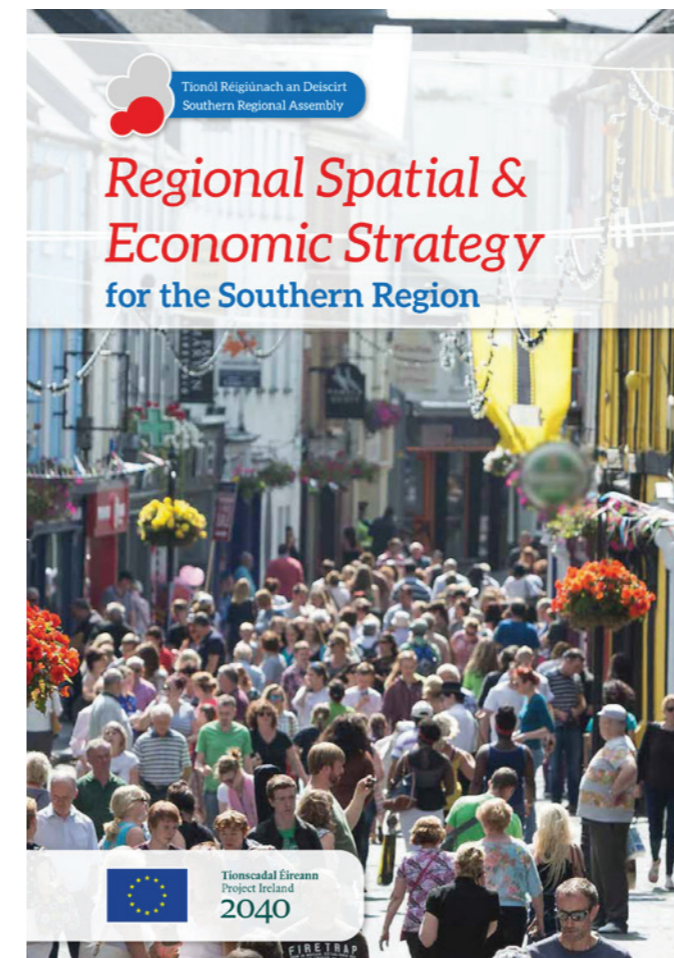
The stated ambition for Kilkenny City is “to grow the City to achieve the targets set out under the RSES through:

- a compact form of development
- the 4 neighbourhood model and City centre
- the 10-minute city concept” (Volume 2, p. 2)

Ireland 2040 Our Plan



NATIONAL PLANNING FRAMEWORK



3.0 STRATEGIC PLANNING CONTEXT

The 10-minute city concept refers to the idea that residents should be able to access local services such as shops, schools and parks within a 10-minute walk or cycle from their homes. This is reflected in numerous objectives throughout the Development Plan, which seek to promote active travel and compact urban form. **Objective 12B**, for instance, is “To plan for a transition towards sustainable and low carbon transport modes, through the promotion of alternative modes of transport, and ‘walkable communities’ together with promotion of compact urban forms close to public transport corridors to encourage more sustainable patterns of movement in all settlements” (Volume 1, p. 236).

The ‘four neighbourhoods’ referred to above are identified in the Development Plan as:

1. Loughboy / Archerstreet;
2. Newpark Upper / Eastern Environs;
3. Poulgour / Wetlands / Western Environs (now known as Breaghagh Valley); and
4. Loughmacask.

Section 2.2.2 of Volume 2 of the Development Plan sets out the Council’s policies and objectives specifically in relation to the 24.37 hectare Loughmacask development lands:

“Breaghagh Valley(formerly Western Environs) and **Loughmacask** will be the focus for greenfield development over the plan period. The majority of these areas are located outside the built-up area but are immediately contiguous to it. Both of these areas were the subject of Local Area Plans in the past.”

In this regard, the Development Plan notes that:

“Some significant changes have occurred to the parameters of the area since the adoption of the original LAP such as:

- The proposed relocation of the CBS secondary school to a site within the plan area
- A significant proposed redevelopment of St. Canice’s primary school
- A desire to further enhance the connectivity of the new neighbourhood back to the existing built up area.
- A desire to integrate the existing and new road structures to maximise the integration of land use and transportation given the extent of contiguous boundary with the existing built up area” (Volume 2, p. 17)

In relation to the relocated CBS secondary school, the Development Plan states that “A site on the Dunningstown Road has been rezoned to Community Facilities, in order to accommodate the relocation of the CBS school from James’ Street during the plan period with an appropriate access solution to be delivered in the event of any planning application” (Volume 2, p.17). **Objective C6J** has been adopted to ensure the delivery of this school (Volume 2, p. 93):

“To secure the relocation of the CBS secondary school from James Street to a new site in the Loughmacask masterplan area.”

Volume 2 of the Development Plan provides the land use zoning for Kilkenny City, including the Loughmacask development lands. The Masterplan area contains the following zoning objectives:

- **Existing residential:** To protect, provide and improve residential amenities.
- **Amenity / green links / biodiversity conservation / open space / recreation:** To allow for green links and biodiversity conservation and to preserve, provide and improve recreational open space.
- **Strategic reserve:** To conserve and protect Strategic Reserve land from interference from non-agricultural uses. To prevent premature development of agricultural land adjacent to development areas. (Areas of ‘strategic reserve’, will provide for the expansion of the city beyond the period of the Development Plan (i.e. post-2027). In this regard, the Development Plan further states that “Following substantial progress being made in the development of the Breaghagh and Loughmacask neighbourhoods, appropriate planning framework documents will be prepared for some of the area of Strategic Reserve as required in the longer term” (Volume 2, p. 25))
- **Community facilities:** To protect, provide and improve community facilities.
- **New residential:** To protect, provide and improve residential amenities.
- **Neighbourhood centre:** To provide for local shopping, non-retail services, community and social needs.
- **Industrial / warehousing:** To provide for industrial employment and related uses.

The site of an existing Grasslands industrial (SEVESO III) facility is indicated in blue (‘industrial/technology park’), with the corresponding SEVESO III 700 m consultation distance indicated as a dark blue buffer, which takes in most of the Masterplan area.

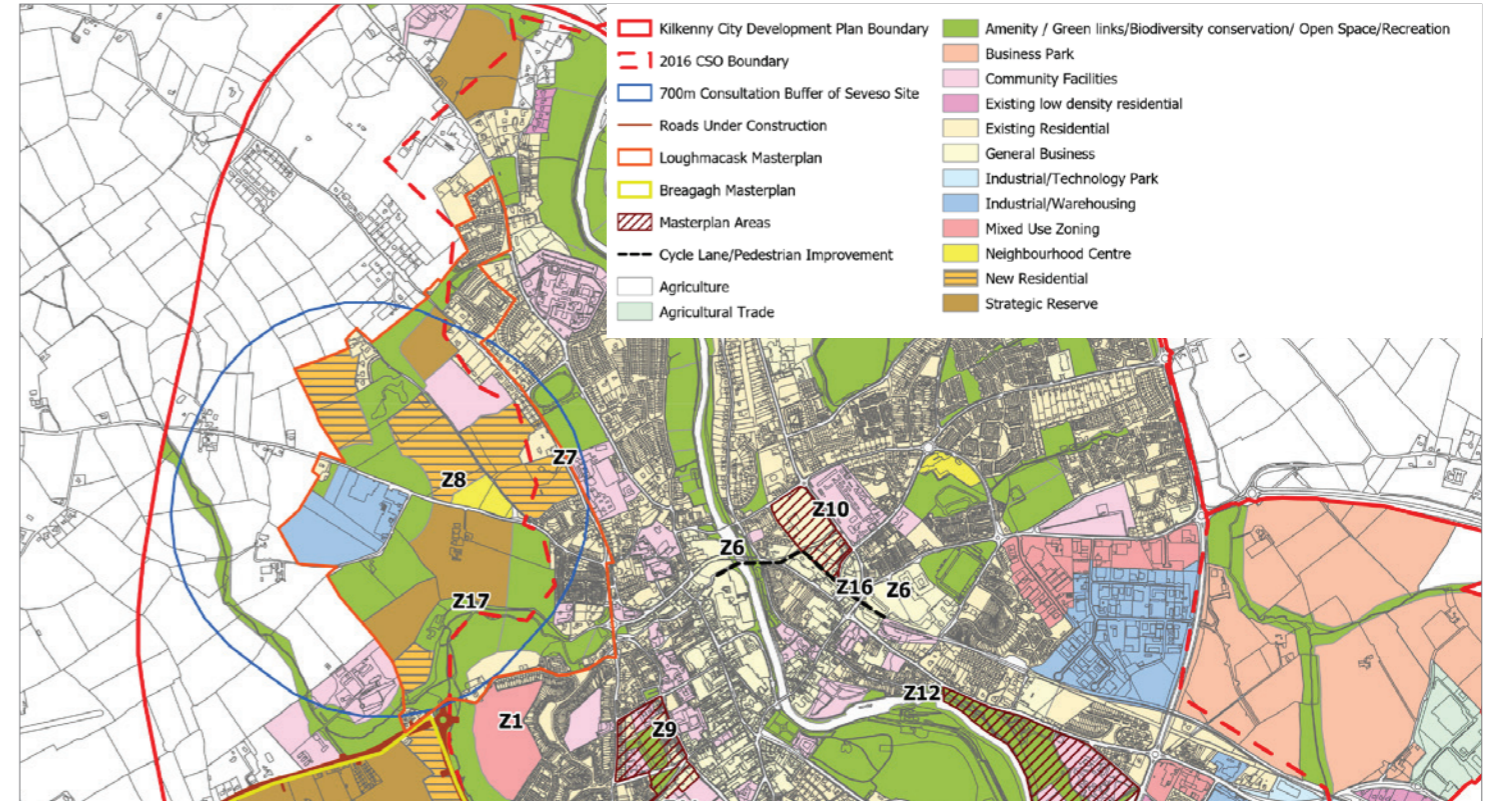


Fig. 3.1 Land use zoning at the Loughmacask Masterplan area (Kilkenny County Council, 2021)

Three specific development objectives are indicated on the Loughmacask lands as follows:

- **Z7 Granges Road and the future Loughmacask village centre:** Provide pedestrian and cycle access through the lands around the former Ayrfield House between the Granges Road and the future Loughmacask village centre. The pedestrian and cycle route should be located within an open space area equivalent to a minimum of 10% of the total residential development area. The open space shall be designed in accordance with principles set out in the Urban Design Manual and the Development Plan.
- **Z8 Loughmacask:** To complete the masterplan for the Loughmacask area which will replace the former Local Area Plan.

In relation to transport infrastructure, **Objective 12AG** seeks the completion of the Central Access Scheme, comprising “internal roads in Kilkenny City to serve the Western Environs\Breaghagh valley and Loughmacask” (Volume 1, p. 251). It is stated that “As part of the Loughmacask masterplan process, the line of the Central Access scheme within the masterplan area is under review” (p. 81).

The Development Plan also refers to the planned Western Bypass scheme, which would complete the ring road surrounding Kilkenny City, ultimately linking the N78 / N76 roundabout with the Waterford Road roundabout. This road will ultimately pass outside the western margin of the development lands. The precise proposed route is not known at this stage and will be subject to a separate feasibility, route selection, design, assessment and consenting process.

Road development objectives of potential pertinence to the Masterplan lands include the following (Volume 2, p. 82):

- **Objective R1:** “Reserve the proposed line of the western by-pass for the city from the Castlecomer Road to the Waterford Road free from development, including for a river crossing and seek approval from An Bord Pleanála for Phase 1 of the Western Bypass, the Kilkenny Northern Ring Road Extension.”
- **Objective R5:** “Reserve the line of Phase 2 of the Central Access Scheme from the Waterbarrack roundabout to the roundabout on the Kilcreene Road.”
- **Objective R6:** “Provide for a road connection from the Freshford Road to the site reserved for a proposed secondary school within the Loughmacask masterplan area.”
- **Objective R7:** “To progress the route selection, planning and development of a road connecting the R695 Kilmanagh Road to the R693 Freshford Road.”

3.0 STRATEGIC PLANNING CONTEXT

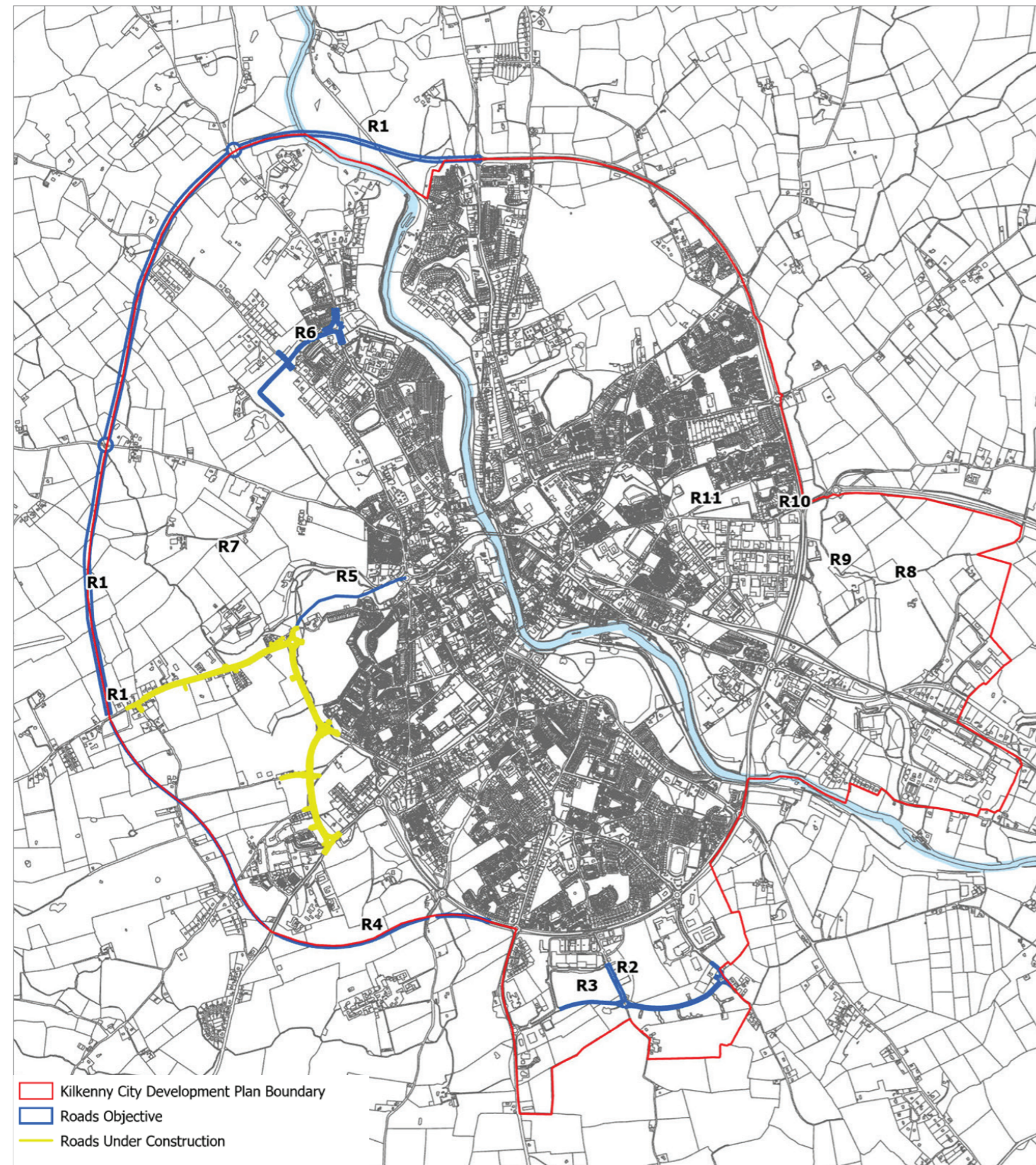


Fig. 3.2 Kilkenny City Roads Objective (Figure MS7, Kilkenny City and County Development Plan 2021-2027, Volume 2)

It is estimated that the Loughmacask development lands have the potential to deliver 904 residential units. The Development Plan requires (under **Objective C6B**) that 10% of land zoned for residential use, or for mixed residential and other uses, be made available for the provision of social housing. It is also required that all new private residential developments on lands zoned in excess of 20 units provide for a minimum of 10% units that can be converted to universal design standards.

The Development Plan points out that the provision of recreational facilities is a requirement of the phased development of the Loughmacask lands:

“Provision has been made in both of these areas [Loughmacask and Breagagh Valley] for open space networks, neighbourhood parks and smaller pocket parks as part of the Local Area Plans previously prepared in 2004 and 2008...” (Volume 1, p. 111)

Key areas and hedgerows / treelines of green infrastructure in Kilkenny City have been identified in the Development Plan.

Two major elements of this green infrastructure network (see Fig. 1.1 Kilkenny City and Loughmacask Context) overlap with the Loughmacask Masterplan area:

1. The green infrastructure corridor associated with the Breagagh River, running along the southern margin of the Masterplan area; and
2. The semi-natural area associated with Loughmacask, which is also a proposed Natural Heritage Area (pNHA).

In relation to the Breagagh River corridor, the Development Plan states that (Volume 2, pp. 98 – 99):

“The Breagagh River corridor, from the Water Barrack (westwards and southwards) is designated open space for most of its course and has the potential to be developed as a regional open space providing links from the Western Environs to the City.”

“The Council will promote the natural amenity potential of the River Nore, River Breagagh and Pocke River in order to facilitate the development of amenity, recreational, biodiversity and tourism benefits for the city, and will work with agencies and communities to improve access and facilities along the rivers in appropriate locations subject to the availability of resources.”

In relation to the general protection of open space, the Development Plan states the following (Volume 2, p. 100):

“The Council will not normally permit development which is not compatible with or would result in the loss of green infrastructure or land zoned for recreational or open space purposes. An exception may be considered where one or more of the following requirements are demonstrably met:

- *The proposed development can clearly demonstrate that it can contribute to the making of quality space and will enhance and benefit place making in the area.*
- *There is a clear excess of playing fields or open space provision within the area. This should consider the long-term needs of the community, the type, recreational, amenity value and accessibility of such provision.*
- *Alternative compensatory provision is made which is both accessible to and of equal or greater quality and benefit to the community served by the existing open space.*
- *The continued use, proper maintenance and enhancement of the amenity/facility can best be achieved by the redevelopment of a portion of the site that will not adversely affect its overall sporting, recreational, amenity or place making value of the facility.*
- *The site is indicated for an alternative use in this Development Plan.”*

The Central Access Scheme, has a new crossing of the River Nore connecting from the Castlecomer Road on the eastern side to Dean Street on the west and on to Water Barrack. This first section, including the new St. Francis Bridge, was opened in 2017.

The second section connecting the Water Barrack to the River Breagagh Valley is retained in the Kilkenny City and County Development Plan 2021 -2027 and has also been considered in this Masterplan.

The Loughmacask Local Area Plan 2008-2014 (LAP), adopted in April 2008, set out the vision and guiding principles for the development of Loughmacask at that time. While many of the objectives contained in the LAP remain relevant, the LAP was predicated on the 2006 alignment of the Central Access Scheme.



4.0 LANDS AT LOUGHMACASK



Lousybush Lane



River Breagh Valley between Kennyswell Road and Breagh River



Lough Macask viewed from Lousybush Lane

4.0 LANDS AT LOUGHMACASK

4.1 City and Local Context

The lands at Loughmacask, the subject of this Masterplan, extend to c. 150 hectares to the immediate northwest of Kilkenny city centre.

The lands are bound by the Dunningstown and Granges Road to the north, to the east and southeast by Kilkenny city, and by the River Breagagh Valley and Kennyswell Road to the south. The western and northern extents adjoin rural agricultural lands.

Loughmacask derives its name from Lough Macask which is a small wetland at the northern end of Lousybush Lane between the Tullaroan and Dunningstown roads. Lough Macask is a proposed Natural Heritage Area (pNHA).

The lands at Loughmacask generally rise in a north westerly direction from the city and River Breagagh Valley. The sloping terrain is further characterised by localised hillocks, hollows and wetland areas. The lands are mostly in agricultural use.

The Masterplan area is increased from that of the previous Loughmacask LAP to include The Butts and the River Breagagh Valley to the south as well as some additional agricultural lands to the northwest.

Inclusion of the River Breagagh Valley within the Masterplan, together with a renewed approach to mobility affords a substantial opportunity to integrate the natural landscape and amenity area of the River Breagagh Valley and that of the Loughmacask Masterplan and to provide strong walking and cycling links connecting Loughmacask and the city that will underpin delivery of a walkable 10 minute new quarter.

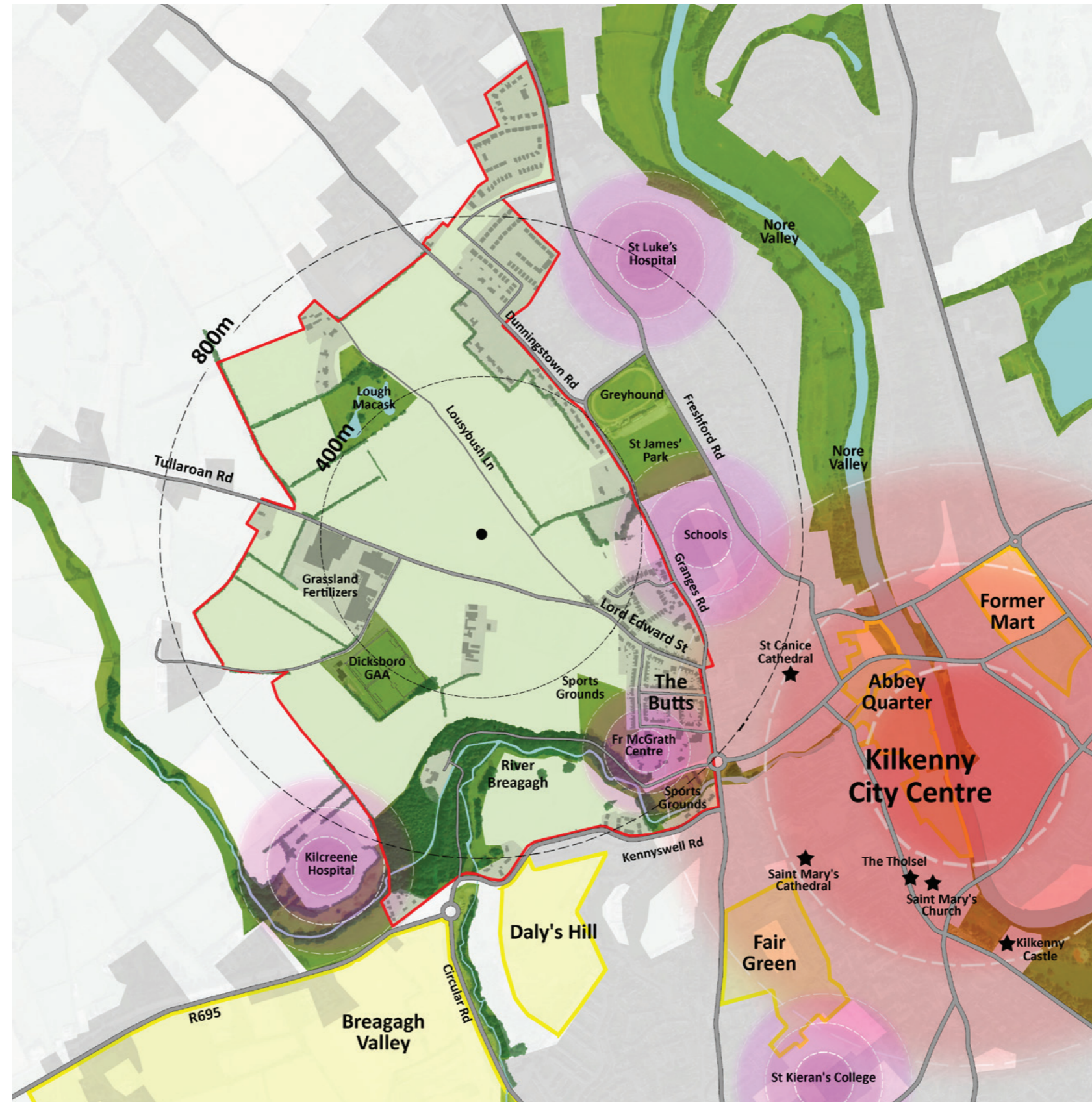
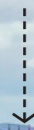


Fig. 4.1 Local and City Context of Loughmacask

- Key
- Loughmacask Masterplan Boundary
 - ★ City Landmarks
 - Other Key development and regeneration lands
 - Amenity, open space, recreation

St. Mary's Cathedral



Loughmacask looking south over the Tullaroan Road, Kilkenny City and the River Breagagh Valley

4.0 LANDS AT LOUGHMACASK

4.2 Loughmacask Lands

4.2.1 Characteristics

Loughmacask offers the combination of both a city and rural living environment. It has a strong rural and agricultural context, however the rising nature of the land is such that there are also strong links to the city. In particular, the city skyline includes the distinctive spires of St. Canice's Cathedral and St. Mary's Cathedral and the woodlands of the River Breaghagh Valley also form part of the setting for Loughmacask.

The undeveloped nature of the lands combined with their proximity to the city affords an opportunity for urban growth at Loughmacask where people can enjoy the high quality urban living with convenient access to both the city and the countryside.

Landscape

The landscape context west and north of Loughmacask is rural with hedgerows boundaries defining agricultural field patterns. To the east, there are existing residential areas along the Dunningstown and Freshford Roads and leading down to the Nore Valley. The River Breaghagh Valley runs through the southern part of Loughmacask and is lined by substantial mature mixed woodland planting.

The topography of the area slopes towards the city with gentle localised undulations. The Lough is located within the more elevated northern part of the lands and is a localised shallow wetland area that fluctuates depending on rainfall and groundwater.

Lousybush Lane leads from The Butts at the city edge to Lough Macask and is defined by limestone rubble walls. The majority of fields between Lousybush Lane and the Tullaroan Road are bordered by mature hedgerows. Elsewhere, boundary hedgerows vary in maturity but do include occasional copses of more mature trees.

Biodiversity

Lough Macask is a designated pNHA displaying a good diversity of plant species including pure aquatic species and marginal wetland species. The protection and management of Lough Macask and the surrounding area must be an important aspect of future development.

Field boundaries comprise primarily hawthorn hedgerows of varying maturity together with occasional small trees that are primarily Ash. Along the Breaghagh River the land comprises of extensive mature mixed woodland planting and the land around Ayresfield House includes a number of mature lime, beech, horse chestnut and yew trees.

Archaeological Heritage

The Record of Monuments and Places (RMP) shows eight archaeological sites within the Loughmacask Masterplan area. A ninth site outside the area is a Ringfort along the northern end of the alignment of Lousybush Lane. A tenth and previously unrecorded site was identified during field surveys undertaken for the Loughmacask LAP 2008-2014.

Architectural Heritage

There are three Protected Structures within the Masterplan area including Kilcreene Lodge and two sites on the Kennyswell Road with Kenny's Well as one of them. The NIAH also lists the Kilkenny City Parochial House on Granges Road, Ayresfield Lodge (demolished), the handball alley at Water Barrack and paving along Lord Edward Street.

Other Architectural Heritage

Additionally, there are many buildings and built features within and adjoining the area that are of both architectural and cultural heritage significance and value. These include iconic buildings of the city such as St. Canice's Cathedral and Round Tower, St. Canice's Church and St. Mary's Cathedral.

There are also fine views of St. Canice's and St. Mary's Cathedrals from Tullaroan Road to be protected.

The Butts was built in the early 20th century and is an early example of local authority residential development adjacent to the city and has established a strong local community. The Butts is at the interface of the City and Loughmacask.

Loughmacask also includes a range of vernacular farm buildings, dwellings, stone walls and gate features that are characteristic of this agricultural hinterland of the city.



Lough Macask



Ringfort



Kenny's Well



4.0 LANDS AT LOUGHMACASK



Lousybush Lane



St. Mary's Cathedral



Kilcreene Lodge



The Butts



Stone Wall at Tullaroan Road

4.0 LANDS AT LOUGHMACASK



Archaeological & Architectural Heritage



KEY

- Masterplan Area
- ★ City Landmarks
- Architectural Conservation Areas
- Record of Protected Structures
- B115 Kenny's Well
- B116 Kenny's Well Road, 34
- C353 Detached four-bay two-storey house
- National Monuments Service
- **KK019-006** Ringfort
- **KK019-007** Ring-ditch
- **KK019-023** Redundant record – linear ditch site
- **KK019-024** Ritual site- holy well
- **KK019-102** Architectural feature
- **KK019-022001** Ring ditch
- **KK019-022002** Ring ditch
- **KK019-022003** Enclosure
- **KK019-022004** Field System
- National Inventory of Architectural Heritage
- **12003001** House (1900 – 1905)- demolished
- **12003002** Presbytery / parochial / curate's house (1915 – 1920)
- **12003054** Cobbles / flags / paving / kerbing
- **12005015** Handball alley
- **12401927** Kilcreene Lodge
- Protected Views
- 2. View of St.Canice's and St.Mary's Cathedrals from Tullaroan Rd
- 6. View of St. Mary's Cathedral from Kenny's Well Road
- 13. View of City from Dunningstown Road
- Existing Trees & Hedgerows
- Existing stone walls
- Special Area of Conservation
- Special Protection Area
- Proposed Natural Heritage Area

Fig. 4.2 Loughmacask Landscape and Heritage Characteristics

4.0 LANDS AT LOUGHMACASK

4.2.2 Land Uses

While the Masterplan area at present is mostly in agricultural use, the eastern edge includes a number of residential developments and individual dwellings, including The Butts, terraced cottages on Lord Edward Street, Ayrfield, Talbot's Court, Talbot's Gate and Lousybush. There are also smaller residential groups along Kennyswell Road to the south.

Community facilities are located adjacent to The Butts including the Fr. McGrath Centre and sports ground. The Dicksboro GAA grounds are located between the Tullaroan Road and River Breaghagh Valley and a site for a new school is located between Lousybush Lane and Dunningstown Road. The River Breaghagh Valley and Lough Macask are significant natural amenity areas. Kilcreene Lodge is set within the River Breaghagh Valley however it is in private ownership.

Bishops Demesne farm is a farm complex on the southern side of Tullaroan Road and the Grasslands fertiliser factory is further west. The latter includes Seveso zones that will inform potential uses in proximity to the factory.



Fig. 4.3 Existing Land Uses and Seveso Zones at Grasslands Factory

KEY

- Masterplan Area
- Existing Residential
- Industrial/Warehousing
- Community Facilities
- Amenity, open space, recreation
- ~ Seveso risk zones
- Existing trees & hedgerows
- ★ City Landmarks

4.0 LANDS AT LOUGHMACASK



Grassland Fertilizers Seveso Site

At present there is one Upper Tier Seveso site within the masterplan area; Grassland Fertilizers (Kilkenny) Ltd Palmerstown, on the Tullaroan Road in Kilkenny.

The EU, Major Accidents Directive (96/82/EC), 1996 (known as the Seveso II Directive), seeks to reduce the risk and to limit the consequences to both man and the environment, of accidents at manufacturing and storage facilities involving dangerous substances.

Article 12 of the Directive provides that appropriate consultation procedures must be put in place so as to ensure that, before decisions are taken, technical advice is available to Planning Authorities in respect of relevant establishments. The Health and Safety Authority (or the National Authority for Occupational Health and Safety NAOSH) provides such advice where appropriate in respect of planning applications within a certain distance of the perimeter of these sites.

The Council will, in consultation with the Health and Safety Authority, control development with regards to SEVESO designated sites for the purposes of reducing the risk or limiting the consequences of a major accident.

*Objective:10H
(Kilkenny City and County Development Plan 2021-2027)*

It is an objective of the Council to, with due regard to the provisions of the Major Accidents Directive and Regulations, give effect to the Directive by controlling development with respect to:

- The siting of Major Accident Hazard sites
- The modification of an existing Major Accident Hazard site
- Development in the vicinity of a Major Accident Hazard site



Fig. 4.4 Seveso Risk Zones

Development Parameters around the Grassland Fertilizers Site

(Land Use Planning Advice for Kilkenny City Council in relation to Grassland Fertilizers (Kilkenny) Ltd at Palmerstown' 2006)

Zone 1

Limited to existing development.

Zone 2

Advise against residential, office and retail. Permit occasionally occupied development e.g. pump houses, transformer stations. Consult with HSA re Industrial development.

Zone 3

Permit workplace development.

Permit residential densities from 28 to 90 persons per hectare, density increasing as risk decreases across the zone and in developed areas, and 22 to 70 persons per hectare in less developed areas.

Permit modest retail and ancillary local services.

Advise against shopping centres, large scale retail outlets, and undue concentration of restaurant and pub facilities.

Zone 4

No restrictions except for sensitive developments, which would be subject to consultation if within the zone and should not be at a risk greater than 0.3.10-6. Sensitive developments include crèches, schools, hospitals and nursing homes. Locations of major public assembly will be subject to individual assessment.

4.0 LANDS AT LOUGHMACASK



The Butts Currently

The Loughmacask lands immediately adjacent to Kilkenny City include the established residential area of The Butts at Butt's Green as well as the community facilities between Water Barrack and The Butts.

The Butts is a typical example of late 19th, early 20th century local authority housing comprising terraces of small single and two storey houses. It is the oldest and is also the highest density local authority estate in Kilkenny.

Urban analysis identifies some challenges facing The Butts including those related to traffic management, regeneration and integration with new development at Loughmacask. This Masterplan provides for addressing these issues in consultation with the local community and stakeholders.

The regeneration of The Butts Area and its further integration into the new Loughmacask area is the one of the aims of this study.



Fig. 4.5 The Butts Currently

EXISTING KEY ELEMENTS:

- | | |
|---------------------------------------------------------------------------------|-----------------------------------------------|
| 1. Main pedestrian/cyclists access point to The Butts area from the City Centre | 7. Residential streets (Congestion/Slow Zone) |
| 2. Sports Grounds with walking track to the rear of existing houses | 8. Lack of pedestrian crossing |
| 3. Playground | 9. Future Road (R5 Objective) |
| 4. Gate controlled pedestrian access to amenities | 10. Underutilised land |
| 5. Multi-Use Games Area | 11. Inaccessible large natural area |
| 6. No access beyond this point | 12. Handball Alleys in need of refurbishment |



Car orientated main pedestrian/cyclists access



Car orientated environment



Sports Grounds to the rear of existing houses

4.0 LANDS AT LOUGHMACASK



4.2.3 Access and Public Transport

At a city level, Loughmacask is located to the northwest and access at present is predominantly via the city centre and along Tullaroan Road. Some traffic comes from the west and north via Kennyswell Road, Tullaroan Road, Granges Road and the Freshford Road.

At the local level, there are a number of access points along the Freshford, Dunningstown and Granges Roads leading to particular residential developments. Similarly, Kennyswell Road provides access to residential groups along the southern edge and also to the southern gates of Kilcreene Lodge.

Lord Edward Street leads to Tullaroan Road accessing the Dicksboro GAA and Grasslands factory and also to Lousybush Lane and Lough Macask.

Water Barrack on the northern side of the Breagagh River leads to a small group of private dwellings and to the eastern gates of Kilcreene Lodge.

Tullaroan Road is the only road running through the overall Loughmacask lands.

Key public transport routes are located to the east of the Loughmacask lands with the nearest bus stops facilitated along Freshford Road and around Water Barrack roundabout.



Fig. 4.6 Access and Public Transport



St. Canice's Cathedral

St. Mary's Cathedral

Loughmacask looking south-east over the Tullaroan Road, Lousybush Lane and Kilkenny City

5.0 PRINCIPLES AND STRATEGY

5.1 Principles

Delivery of a new urban quarter of Kilkenny City that is connected and integrated with the city requires the adoption of a number of key principles from the outset so as to guide the short, medium and longer term delivery of Loughmacask in parallel with wider city infrastructure.

The key principles are informed directly by the Vision for Loughmacask as a walkable residential quarter and are rooted in both National and Local planning policy. They are:

- Compact Growth and Integration
- 10 Minute City Quarter
- Ease of Access and Movement
- Sustainable Land Use

5.1.1 Compact Growth and Integration

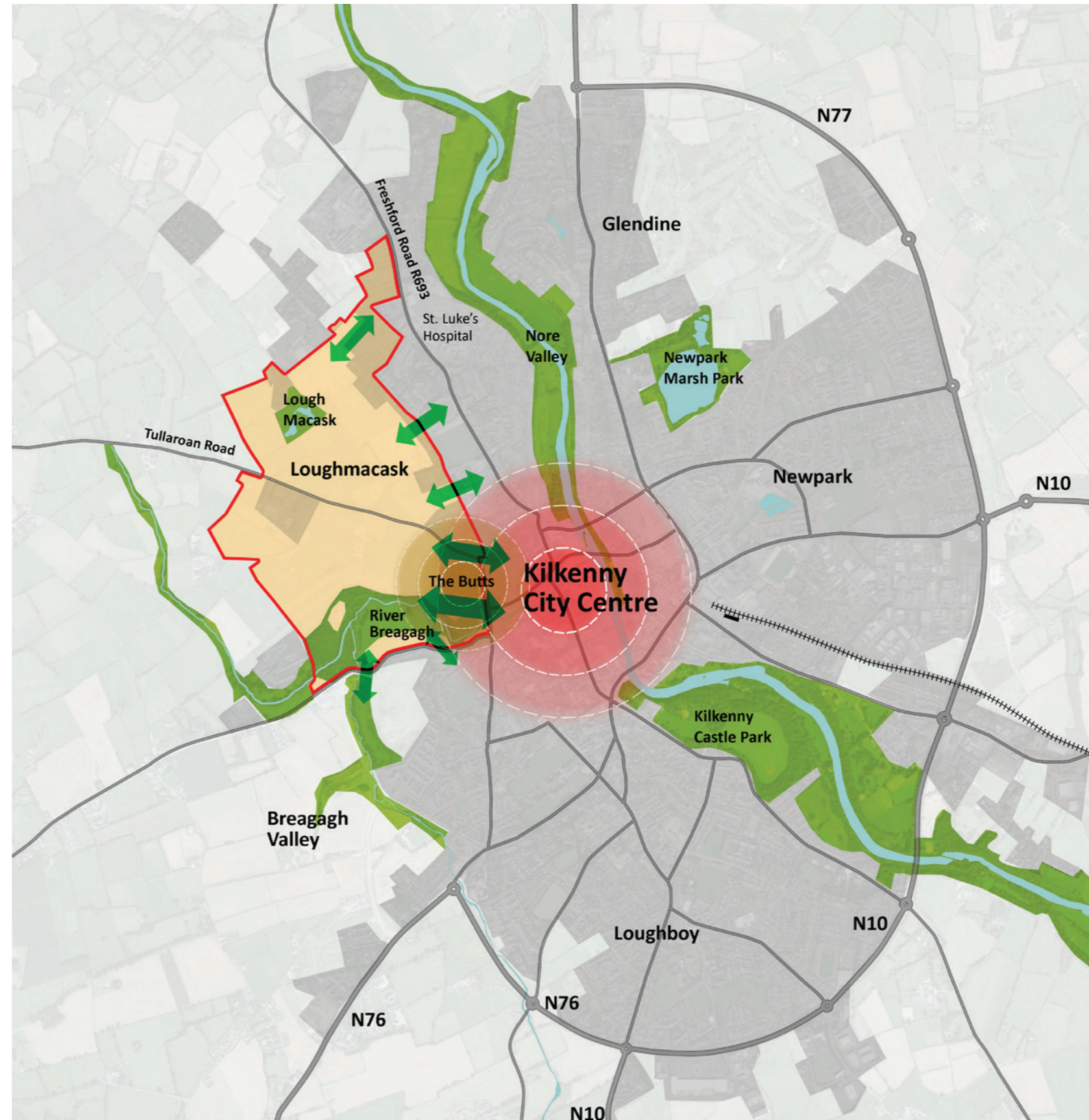
Loughmacask will establish a new urban quarter at Kilkenny City that is fully integrated with the City.

The eastern and southern edges adjoin the existing city environs and connections to and from the city will be developed to support and promote walking, cycling and access to local bus services and other land uses.

The Butts is an established residential area at the interface between the City and Loughmacask. This masterplan anticipates enhancements within The Butts subject to consultation with the local community and stakeholders.

The renewal of The Butts through enhanced sense of identity, improved connectivity and upgraded public realm will seamlessly integrate Loughmacask into the existing fabric of Kilkenny City Centre at this gateway location.

Loughmacask will enhance the existing heritage and green characteristics of the Masterplan area to ensure that the new Masterplan area is distinctive and culturally connected with its City, landscape, and heritage context.



Key

— Loughmacask Masterplan Boundary

Fig. 5.1 Loughmacask City Integration

5.0 PRINCIPLES AND STRATEGY



5.1.2 10 Minute City Quarter

The 10-minute city concept refers to the idea that residents should be able to access local services such as shops, schools and parks within a 10-minute walk or cycle from their homes. The Development Plan notes that, given its modest scale, Loughmacask is ideal for the adoption of this concept as a guiding principle for development. This is reflected in numerous objectives throughout the Development Plan, which seek to promote active travel and compact urban form. Objective 12B, for instance, is “To plan for a transition towards sustainable and low carbon transport modes, through the promotion of alternative modes of transport, and ‘walkable communities’ together with promotion of compact urban forms close to public transport corridors to encourage more sustainable patterns of movement in all settlements”

- Loughmacask will have a local centre at the junction of Tullaroan Road and Lousybush Lane and within a 10 minute walk from all homes in Loughmacask.
- The local centre, new school, green spine and River Breagagh Park will all be readily accessible by walking and cycling.
- The Butts and Water Barrack area will become a vibrant and walkable gateway areas providing direct access between Loughmacask and Kilkenny City.
- The green network will also connect to the hierarchy of passive and active open spaces and amenity areas providing safe routes throughout Loughmacask that should substantially eliminate the need for local car journeys.

KEY





-  Masterplan Area
-  Walking/Cycling Connections
-  Bus Routes
-  Pedestrian/Cycling Only



Fig. 5.2 Loughmacask Green and Walkable New Quarter

5.0 PRINCIPLES AND STRATEGY

5.1.3 Ease of Access and Movement

A Western Bypass corridor will ultimately reduce the need for through traffic in the city centre. Completion of the Northern Ring Road Extension will be an important element to this and will be essential to the transportation and land use activities in the City.

Loughmacask is plan-led from the outset so that the primary vehicular access will be from the east or the west into but not through Loughmacask.

A route selection process will be undertaken to determine the most appropriate route for a new road (R7) to connect the R693 Freshford Road to the R695 Kilmanagh Road. The route of this road will likely run to the west of the Loughmacask area, thereby facilitating the primary vehicular access to Loughmacask from the west, rather than from the city centre. Local access will continue to be provided along the existing street network with access points from these developed so as to ensure high quality, attractive and safe pedestrian and cycle mobility within the Loughmacask neighbourhood and the wider City.

Lousybush Lane will remain a defining characteristic of Loughmacask and will be strengthened by being reserved for pedestrian and cyclist use only.

Objective 5a: To develop the existing Lousybush Lane as a pedestrian and cycle route connecting Loughmacask to the wider city network.

Phased implementation of additional road infrastructure in accordance with Objective R7 of the City & County Development Plan Vol 2 Chapter 5 will facilitate phased changes in traffic movements, including re-routing HGV traffic from the Tullaroan and Granges Roads to the bypass that will further assist in creating a safe street environment within Loughmacask.

A significant difference between the Loughmacask LAP 2008 and this Masterplan is the removal of through traffic from the area by the reconfiguration of the road objectives for the area and the re routing of through traffic.



Fig. 5.3 Wider City Road Infrastructure

| KEY | |
|------------------------------------------|------------------------------------|
| — | Masterplan Area |
| R1, R4 | Western Bypass Corridor Objectives |
| — | Completed/under construction roads |
| R5 | Road Objective |
| R6, R7 | Road Objectives |

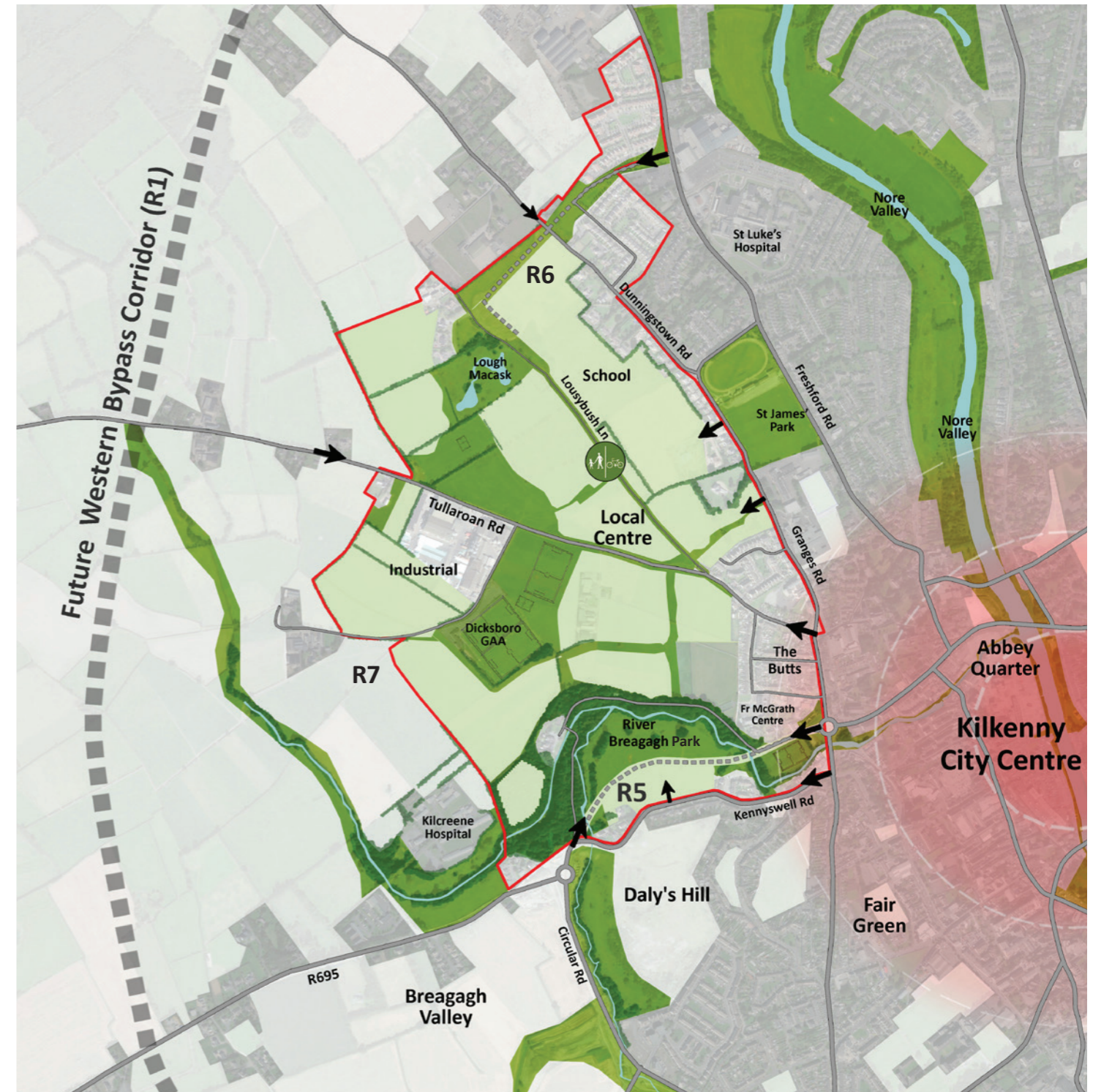


Fig. 5.4 Loughmacask Access

| KEY | |
|---------------------------------------------------------------|----------------------|
| — | Masterplan Area |
| — | Existing Roads |
| R6, R7, R1, R5 | Roads Objectives |
| | Future Roads |
| → | Site Access |
| 🚶 | Walking/Cycling Only |

5.0 PRINCIPLES AND STRATEGY



5.1.4 Sustainable Land Use

The local centre will include an appropriate sized local supermarket, in accordance with the Development Plan Retail Strategy, and a number of smaller retail and commercial units that cater for the day-to-day need of the local community. This will be at the junction of Tullaroan Road and Lousybush Lane and central to Loughmacask. Lousybush Lane will provide car free access to the eastern side of the local centre while Tullaroan Road will facilitate local vehicular access.

New residential development will be the primary land use and a new secondary school will be provided at Lousybush Lane. Lousybush Lane will be a significant walk and cycle access route for students with vehicular access provided from the northern end of Dunningstown Road.

The Fr. McGrath Centre is an existing focal point of the community within the area.

The Lough Macask, open space areas and the River Breaghagh Park will form a primary green spine with smaller green links to secondary open spaces and to residential areas.

It is acknowledged that Grassland Fertilizers will continue to operate in its current location for the foreseeable future, however - should the facility ever be relocated in the future, the lands could accommodate additional residential development or alternative employment uses as appropriate.

There are proposed changes between the Loughmacask Masterplan strategy and the land use zoning in the Development Plan, as follows:

- The Butts neighbourhood area to be designated as a “Special Regeneration Area”.
- Lands designated as Open Space immediately west of The Butts in the Development Plan (see no.1 Fig. 5.5) have been partially changed to Residential to provide for the integration of the well-established Butts community into the planned Loughmacask development, rather than physically separating it from this planned new neighbourhood.
- Lands designated as Strategic Reserve to the north-east of the Dicksboro GAA in the Development Plan (see no.2 Fig. 5.5) have been partially changed to Open Space/Recreation to provide additional recreational amenities which could work in tandem with existing GAA grounds.
- Lands designated as Open Space and Strategic reserve to the south-west of the Dicksboro GAA grounds in the Development Plan (see no.3 Fig. 5.5) have been changed to Residential to facilitate future primary vehicular access to Loughmacask from the west which in turn will create a new gateway at this location.
- Under the Masterplan, open space has been extended more widely throughout the development lands (e.g. through the retention of hedgerows, inclusion of pocket parks or unlocking River Breaghagh Park), to provide for greater connectivity between green spaces, providing for ecological corridors and for ease of movement by pedestrians and cyclists throughout the area.



Fig. 5.5 Loughmacask Land Use

5.0 PRINCIPLES AND STRATEGY



5.2 Strategy

A plan-led approach will ensure that Loughmacask will be a distinct urban quarter of Kilkenny City that delivers on the Vision and Principles in the short, medium and longer term. High quality homes will have excellent walking and cycling links for day-to-day local and city trips as well as for amenity and leisure that will underpin the establishment of a strong and healthy community.

Ultimately, Lousybush Lane will be a defining characteristic of Loughmacask reflecting the historic pathway and epitomising the walkable new quarter of Kilkenny City.

Into the future, vehicular access will be provided principally from the west and subject to route options assessment may be from the Western Bypass or from a direct road link from the R695 in the shorter term. Additionally, local access points will be provided from the Tullaroan, Dunningstown and Granges Roads. Through traffic will be designed out so as to ensure a high quality and safe walking environment.



Fig. 5.6 Loughmacask Masterplan Strategy

6.0 MASTERPLAN



Illustrative Land Use Typologies

6.0 MASTERPLAN

6.1 Land Use

The primary land use will be residential comprising a range of housing typologies and densities that respect, extend and integrate with established residential areas.

A neighbourhood centre will comprise a local supermarket and a number of smaller supporting retail and commercial units providing a focal point at the centre of Loughmacask for day-to-day needs of the community.

A new secondary school will be located towards the northern end of Lousybush Lane and will be readily accessible to the local community.

A network of open spaces will be provided for amenity and leisure ranging from the larger green spine linking Lough Macask to the River Breagagh Valley via Dicksboro GAA and including additional smaller pocket parks, green links and play areas.

The existing Grasslands factory will be separated from residential use by the green spine. Should the Grasslands factory ever be relocated, the masterplan can accommodate additional residential development or alternative employment uses on its lands as appropriate.

The Butts neighbourhood area to be designated as a “Special Regeneration Area” as shown on Figure 6.2.

Note proposed changes between the Loughmacask Masterplan strategy and the land use zoning in the Development Plan, which are described in chapter 5.1.4 of this study.

KEY

- Masterplan Area
- Local Centre
- Existing Residential
- Special Regeneration Area
- Residential
- Industrial/Warehousing
- Community Facilities
- Amenity, open space, recreation
- Existing trees & hedgerows



Fig. 6.1 Loughmacask Land Use

6.0 MASTERPLAN

6.1.1 The Butts Special Regeneration Area

The Loughmacask Masterplan area incorporates The Butts together with the adjoining amenity sports grounds at the interface of Loughmacask and the City.

Under the Masterplan, this area is designated a “Special Regeneration Area” and any proposals will be only be on foot of further engagement and consultation with the local residents and stakeholders.

Objective 6a: No proposal for housing development shall be brought forward for statutory planning approval by the Council within The Butts “Special Regeneration Area” as delineated until such time as there is proactive engagement with the residents and stakeholders on the specific development proposal(s).

It is anticipated that any proposals within The Butts “Special Regeneration Area” will build on the location, identity and strong community character of this area to establish a predominantly pedestrian and cycling connection from the City Centre to the Loughmacask Masterplan area. Regeneration proposals within The Butts “Special Regeneration Area” may seek to:

- Improve quality of life in The Butts through improved connectivity, visibility & integration;
- Enhance sense of identity whilst seamlessly integrating all surrounding communities/amenities and future developments;
- Sustainably preserve & enhance the character & nature of the existing community fabric;
- Consider appropriate and complementary uses for vacant and underutilised land/sites;
- Consider enhancement of the area to the west (rear of Connolly Street, The Butts);
- Provide for enhanced passive surveillance to public open space;
- Consider cycling and pedestrian linkages within The Butts and between the wider Loughmacask area and the City;
- Consider the issue of car access and parking within the area for residents.

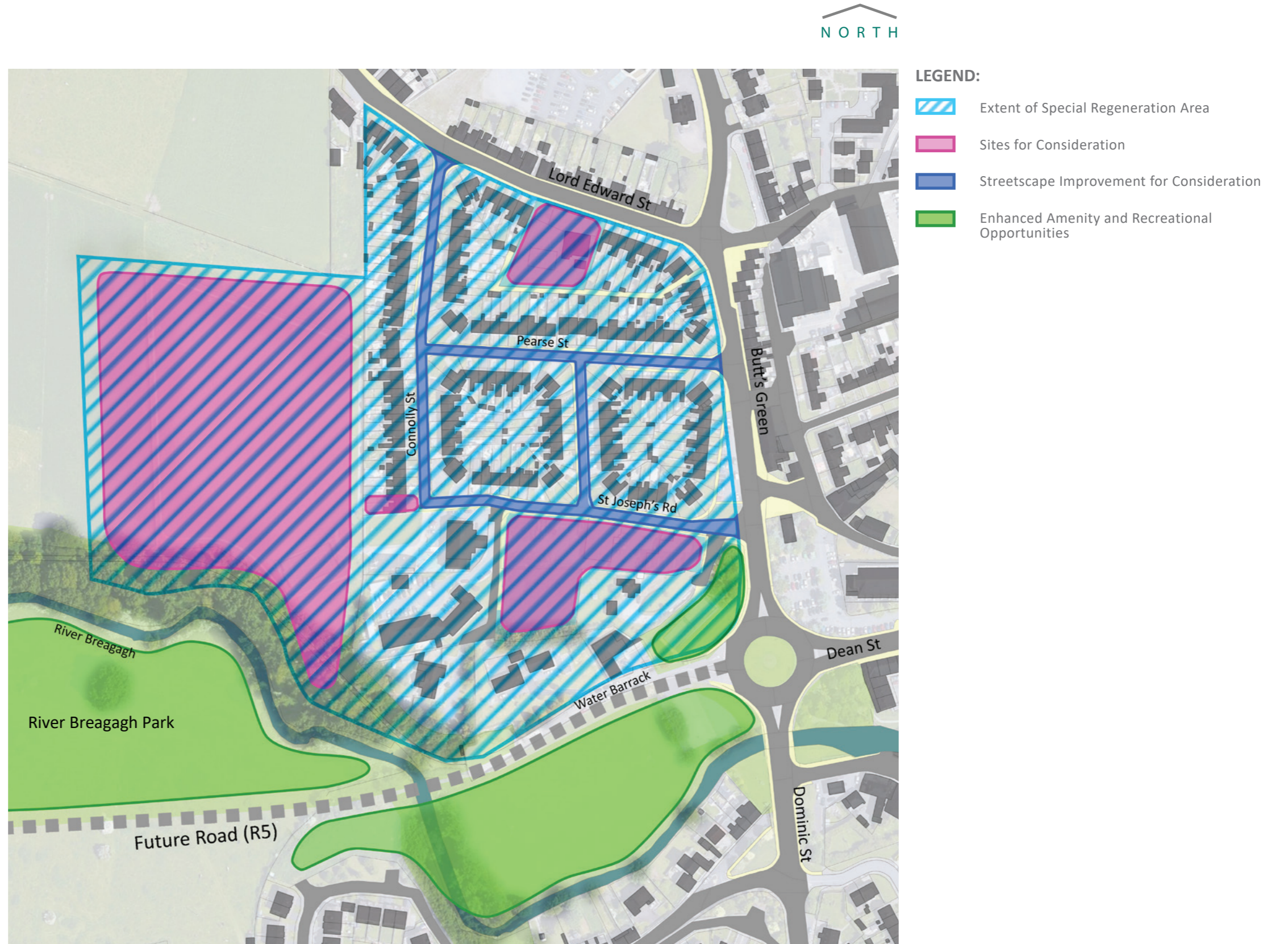


Fig. 6.2 The Butts “Special Regeneration Area”

6.0 MASTERPLAN

6.2 Connectivity and Access

Loughmacask will be a high quality, walkable and connected new residential quarter. It will be notably different from many residential developments with highly visible walking and cycling facilities throughout and with local access points for vehicular traffic quickly transforming to homezone style shared streets.

Lousybush Lane will be a primary green link that is free of vehicles and providing a convenient and attractive route for local journeys from homes to the local centre, schools, community facilities and amenity spaces. This will be replicated elsewhere in the street network so that all of Loughmacask will be served by a network of green, safe and walkable links.

Key Pedestrian/ Cycle routes are indicative. Future zoning reviews for Strategic Reserve lands adjacent to Dicksboro will have regard to the need to provide public cycle paths and the potential for the expansion of existing Dicksboro pitches to GAA standards.

Objective 6b: To carry out a route selection for the most advantageous connection from The Butts to the Breaghagh Valley Park, with due regard to ecology, heritage and amenity.

Also a route selection process will be undertaken to determine the most appropriate route for a new road to connect the R693 Freshford Road to the R695 Kilmanagh Road. (Objective R7 Vol 2 Chapter 5 of the City & County Development Plan). The optimal route would run to the west of the Loughmacask area, thereby facilitating the primary vehicular access to Loughmacask from the west, rather than from the city centre. In the interim primary vehicular access will continue to be provided along the existing street network with access points from these developed so as to ensure high quality, attractive and safe pedestrian and cycle mobility within and between Loughmacask neighbourhood and the wider City.

Objective 6c: To prioritise that route selection and construction of connecting inner orbital route (R7 in the City and County Development Plan 2021-2027) from the Kilmanagh Road to the Freshford Road.

Objective 6d: To investigate, how the Objective R6 (Vol 2 Chapter 5 of the City & County Development Plan) can be connected with the Tullaroan Road subject to appropriate traffic management regime.

Traffic management and modification of streets, including the additional route to the west, will ultimately eliminate the majority of through traffic and in particular, HGVs.

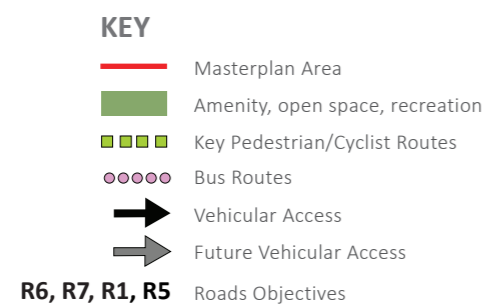


Fig. 6.3 Pedestrian, Cycling and Vehicular Access Network



6.0 MASTERPLAN

Lousybush Lane

Lousybush Lane is a narrow local access road linking Lord Edward Street and existing houses and farmland complex to the north of Lough Macask.

The heritage of Lousybush Lane is contained, at least in part, within its stone walls, which run along the western side. In addition to being a strong existing feature, the stone walls have the potential to be incorporated into the design of the site as a meaningful aesthetic feature.

It is an intention to transform the Lousybush Lane into a car free zone and create safe walkway and cycle routes for all. As Lousybush Lane is adjacent to the proposed CBS Secondary School it will become an important part of the connectivity of the school to the city and adjoining Loughmacask development, thus promoting walking and cycling for students to the school in a safe environment. It will also have benefit of reducing road traffic to and from the new school.

As part of transforming Lousybush Lane into a car free walkway and cycle route, road Objective R6 from the City Development Plan: "Provide for a road connection from the Freshford Road to the site reserved for a proposed secondary school within the Loughmacask masterplan area." would need to be delivered.

The new link road would also replace current access to the existing houses and farmland complex at this location.



Lousybush Lane (Artist Impression)



Lousybush Lane currently

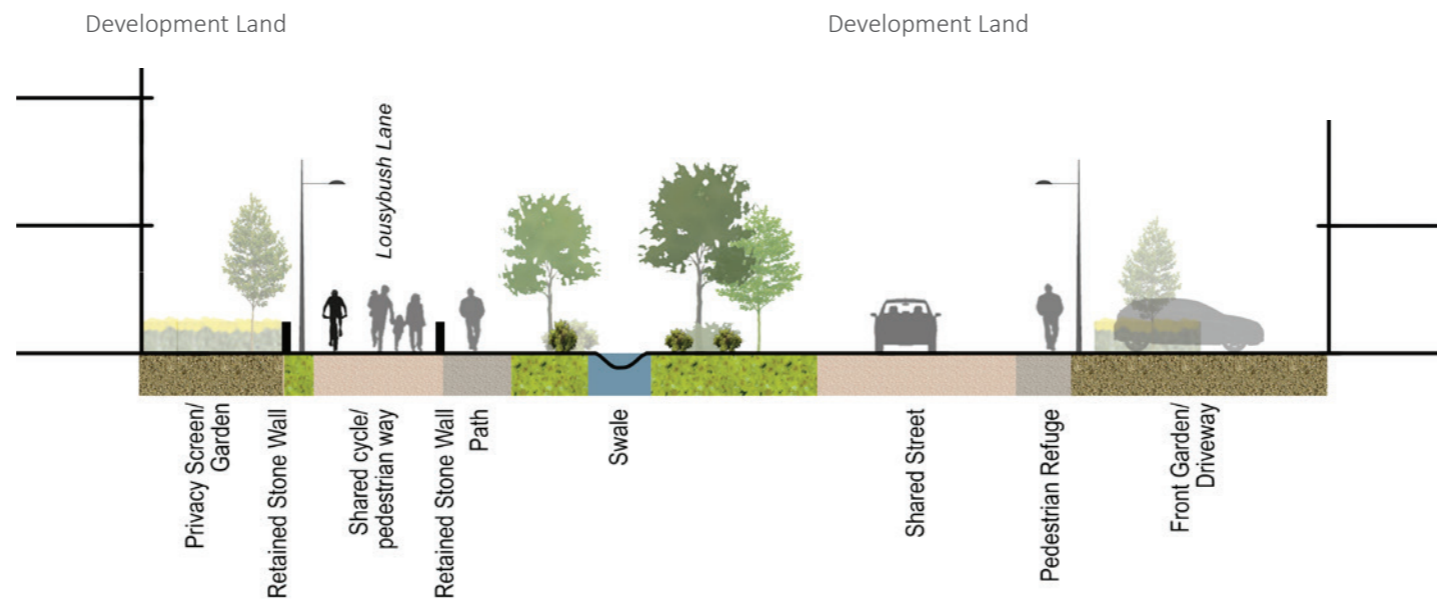


Fig. 6.4 Indicative Lousybush Lane Cross Section

6.0 MASTERPLAN

6.3 Open Space

The open space network at Loughmacask will be informed by the existing features such as Lough Macask, Dicksboro GAA grounds, the Seveso designation at Grasslands, the community playing field at the Fr. McGrath Centre and the River Breagagh Valley.

A primary north-south green spine will be established by connecting these spaces and secondary green links will lead between this green spine and each of the residential areas and secondary open spaces.

The River Breagagh Park will be developed between the Breagagh River and the Central Access Scheme link road and pedestrian and cycle links will connect the residential areas of Loughmacask with the park.

Key Public Open Space Areas

- A Linear Park along proposed road (R6) with cycle link.
- B Loughmacask Park Area. Main recreational area in the northern part of Loughmacask with high ecological value.
- C Public Park with potential Multi-Use Games Area and playground.
- D Seveso Risk Zone 1&2 area restricted to use as an open space with no parking or other facilities which would allow the public to congregate and hence be present for long periods of time.
- E Potential Expansion of Dicksboro GAA with additional playing field, Multi-Use Games Area and playground
- F Existing playing fields with walking track, playground and Multi-Use Games Area
- G River Breagagh Park. Natural amenity space for passive recreation
- H Modified playing field at Water Barrack with basketball court










| KEY | |
|-------------------------------------------------------------------------------------|---------------------------------|
|  | Masterplan Area |
|  | Amenity, open space, recreation |
|  | Existing Trees & Hedgerows |
|  | Existing Rivers & Lakes |
|  | Wetland |
|  | Sports/active recreation |
|  | Playground |
|  | Parkland/ Natural Heritage |
|  | Seveso Risk Zones 1&2 |



Fig. 6.5 Open Space Network

6.0 MASTERPLAN

Indicative Open Spaces Typologies



Linear and Pocket Parks

Natural parklands for passive and active recreation

Dedicated Sports facilities

6.0 MASTERPLAN



6.4 Roads Hierarchy

A clearly defined street hierarchy based on Design Manual for Urban Roads and Streets (DMURS) roads classification was created for Loughmacask.

The planned Western Bypass scheme (R1 Objective), referenced in the Development Plan would complete the ring road surrounding Kilkenny City, ultimately linking the N78 / N76 roundabout with the Waterford Road roundabout. This road will ultimately pass outside the western margin of the development lands.

Phase 2 of the Central Access Scheme from the Water Barrack roundabout to the roundabout on the Kilcreene Road (R5 Objective) with R695 Kilcreene Road and R693 Freshford Road are the key arterial streets within the study area.

Link streets identified as Tullaroan Rd, Granges Road and new proposed road running through the lands to the south of proposed local centre, combined with R7 Objective from the Development Plan facilitating the future primary vehicular access to Loughmacask from the west, would feed into arterial streets and the proposed bypass road.

Local and local access streets including the connection from the Freshford Road to the site reserved for a proposed secondary school within the Loughmacask (R6 Objective) will feed into the main spines.

Primary routes will incorporate passive traffic calming and will quickly transition to homezone style streets. Pedestrian and cycle facilities will be prominent and afford a high degree of pedestrian priority.

Objective 6e: To consider what additional traffic management measures could be implemented to mitigate the impact of additional traffic from already approved developments within the plan area on the wider transport network and reduce/eliminate the use of internal streets in The Butts (rat running) at peak hours.

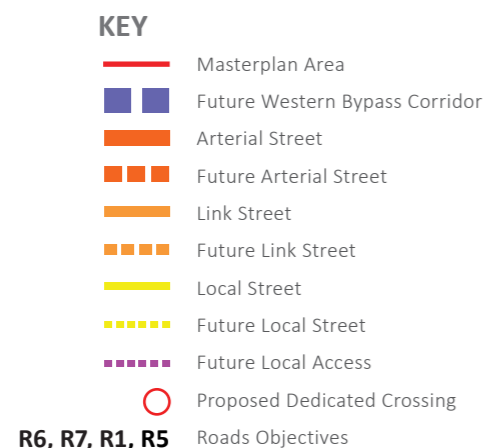


Fig. 6.6 Indicative Existing and Future Roads Hierarchy

6.0 MASTERPLAN

Street Types Typical Sections

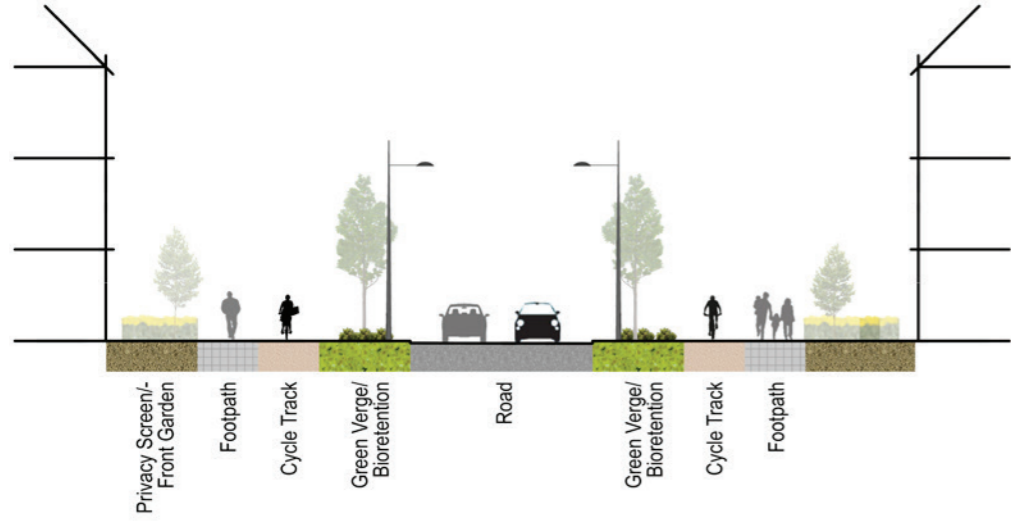


Fig. 6.7 Link Street

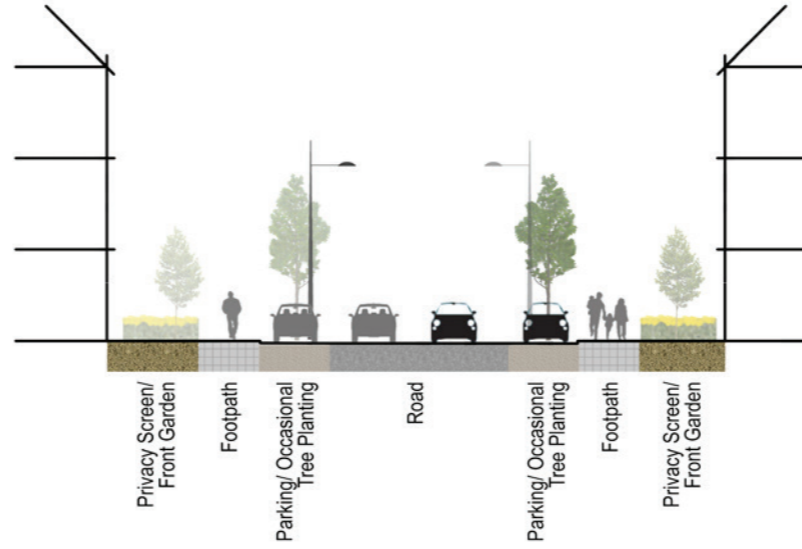


Fig. 6.8 Local Access / Residential Street (Medium/High Density)

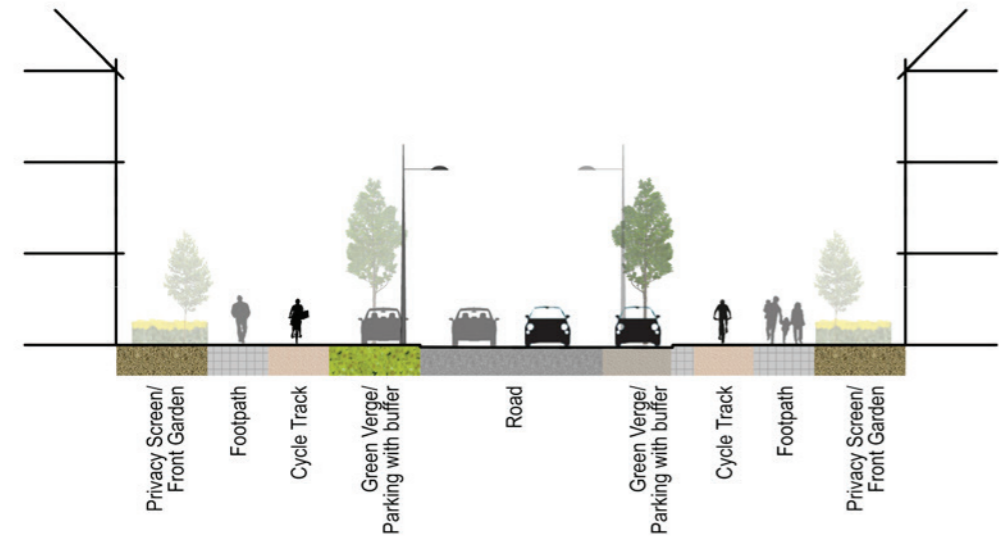


Fig. 6.9 Local Street (Medium/High Density)

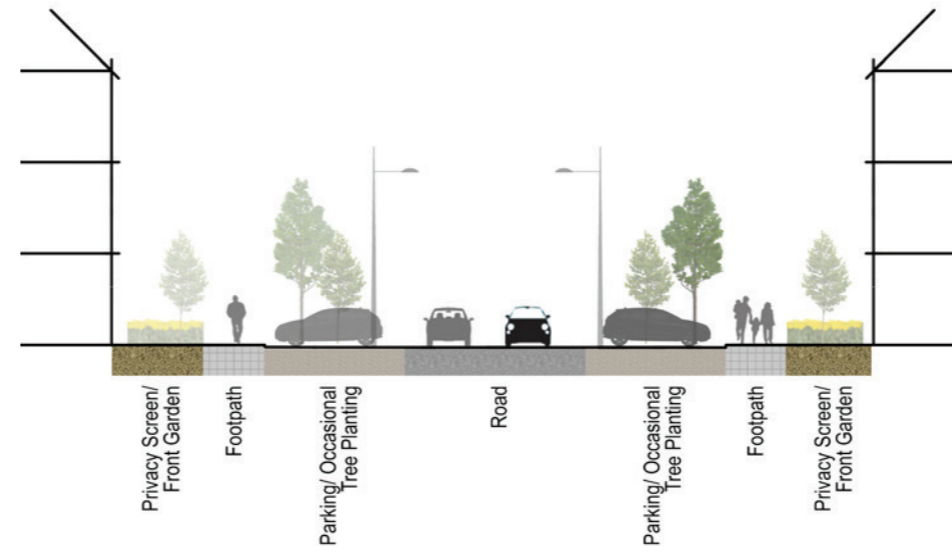


Fig. 6.10 Local Access / Residential Street (Medium/High Density)

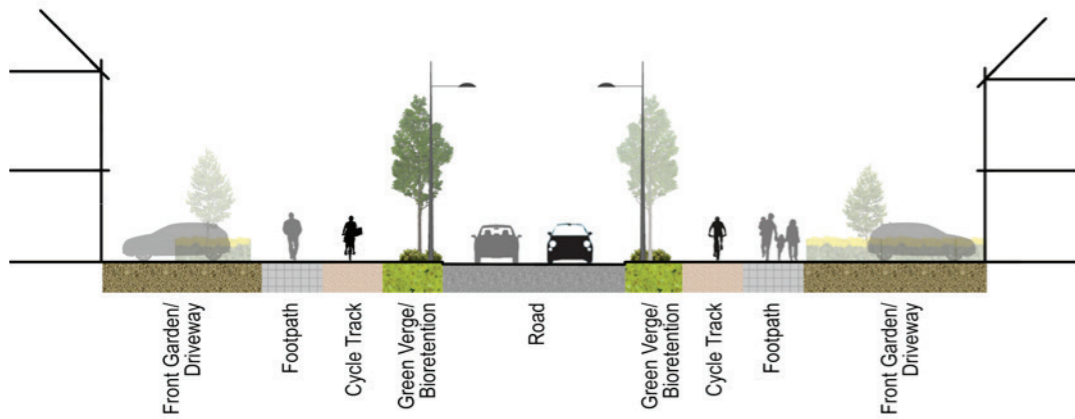


Fig. 6.11 Local Street (Low/Medium Density)

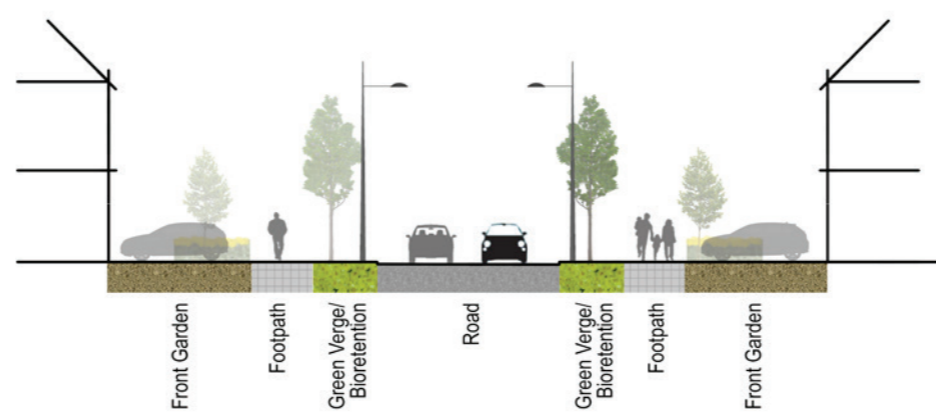


Fig. 6.12 Local Access / Residential Street (Low/Medium Density)

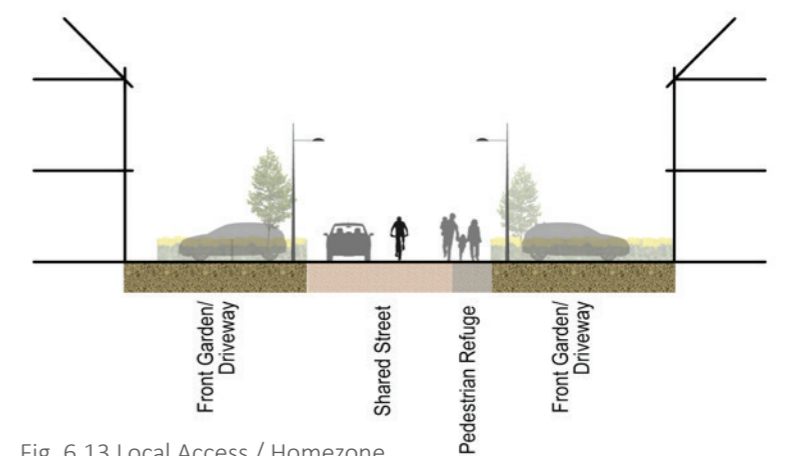


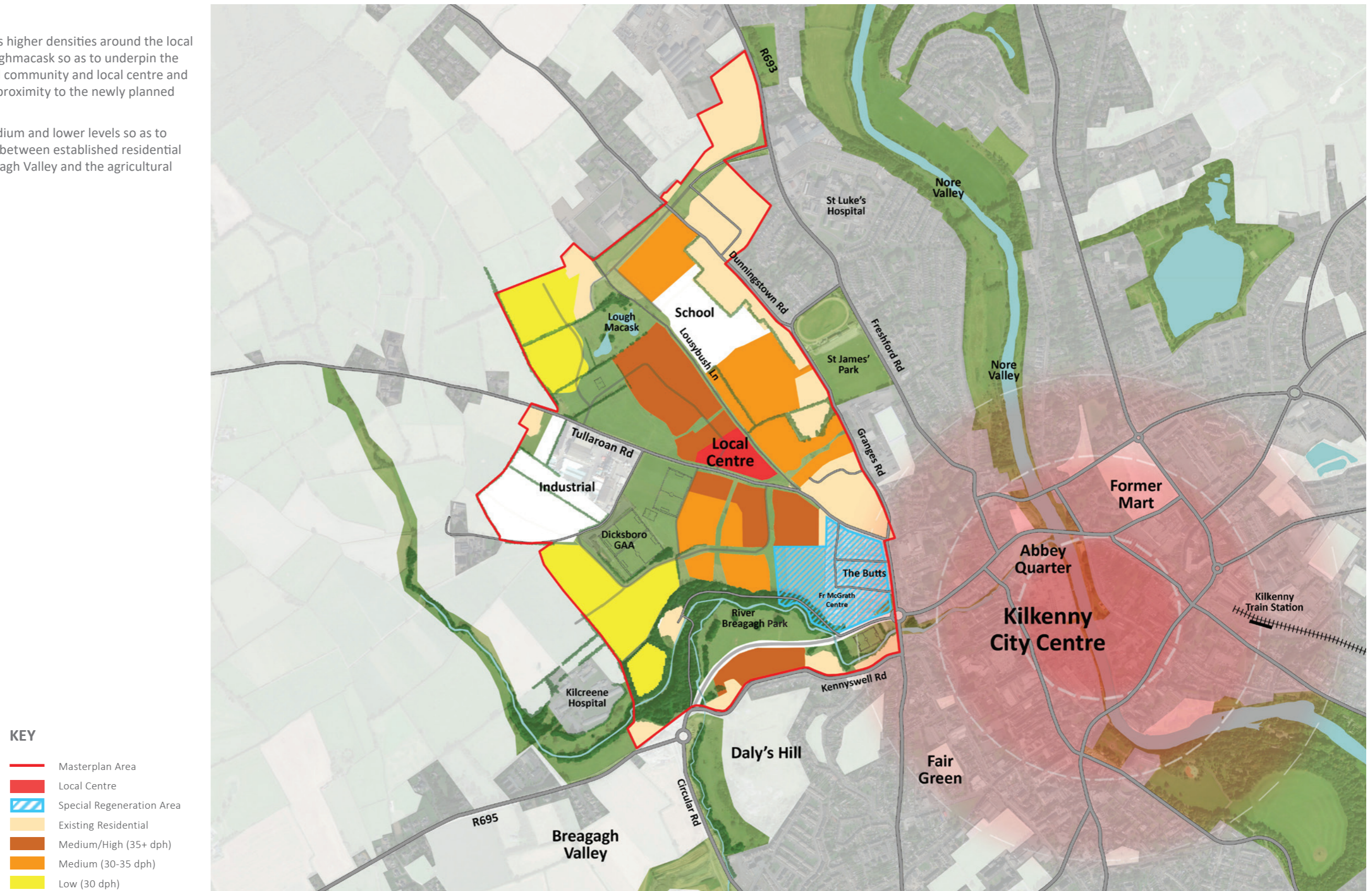
Fig. 6.13 Local Access / Homezone

6.0 MASTERPLAN

6.5 Densities

The density strategy anticipates higher densities around the local centre and centrally within Loughmacask so as to underpin the establishment of a vibrant local community and local centre and to ensure a core population in proximity to the newly planned secondary school.

Densities will step down to medium and lower levels so as to provide appropriate interfaces between established residential areas as well as the River Breagagh Valley and the agricultural context to the west and north.



- KEY**
- Masterplan Area
 - Local Centre
 - Special Regeneration Area
 - Existing Residential
 - Medium/High (35+ dph)
 - Medium (30-35 dph)
 - Low (30 dph)

Fig. 6.14 Residential Density Distribution

6.0 MASTERPLAN

Indicative Residential Densities



Medium/High Density (35+ dph)



Medium Density (30-35 dph)



Low Density (30 dph)

6.0 MASTERPLAN

6.6 Loughmacask Character Areas

The over-arching character of Loughmacask will be of a high quality, walkable, cycle friendly and connected new quarter of Kilkenny City. Green pedestrian and cycle links, together with homezone style streets, will be readily apparent and will underpin the sense of place at Loughmacask.

A network of existing natural features such as Lough Macask and River Breagagh and proposed open spaces will be provided for amenity and leisure ranging from the larger green spine linking Lough Macask to the River Breagagh Valley via Dicksboro GAA and including additional smaller pocket parks, green links and play areas.

The masterplan area will incorporate a number of distinct character areas that will be differentiated by the style of buildings within each area - including established residential areas:


-  **The Butts** will be designated as a “Special Regeneration Area”.
-  **Local Centre (Neighbourhood centre)**, a focal point at the centre of Loughmacask will contain a diverse, mixed use development, containing the main retail and commercial uses to serve the community of Loughmacask and surrounding areas.
-  **Loughmacask Village** will be a primarily medium to high density residential area located to the north-west and to the south of proposed local centre.
-  **Ayrfield** will be a medium density residential area located to the north-east of Lousybush Lane which will also accommodate planned secondary school.
-  **Lousybush**, located to the west of Lough Macask will be a lower density residential area to provide appropriate interface with agricultural context to the west.
-  **Kilcreene**, located to the north of River Breagagh will be a medium to low density housing area with direct frontage to River Breagagh Valley and Dicksboro GAA lands.
-  **Kilcreene Woods** will be a low density residential area within the curtilage of a Kilcreene Lodge.
-  **Crokers Hill** will be a medium/high density housing development overlooking River Breagagh Park.
-  And finally, the existing **Grasslands factory** will be separated from residential use by the green spine.



Fig. 6.15 Loughmacask Character Areas

6.0 MASTERPLAN

6.7 Phasing

The masterplan proposes a simplified phasing strategy as illustrated opposite.

The Masterplan notes that, while planning permission exists for approx. 300+ houses on the lands, no significant development has taken place due to a lack of wastewater infrastructure and accessibility issues.

Over 15ha of the proposed lands for housing in the Loughmacask masterplan area are a subject to planning permissions and are currently extant and could be activated in early phases.

Objective 6f: Subject to the appropriate Zoning being in place and a Traffic Impact Assessment, additional housing developments (over and above the permitted quantum of housing) with access off the Tullaroan Road will not be permitted unless a clear timeframe for delivery of the necessary extent of support road infrastructure Objective R7 (being either Kilmanagh Road to Tullaroan road) or (the Tullaroan Road to Freshford road) in the City and County Development Plan is in place.

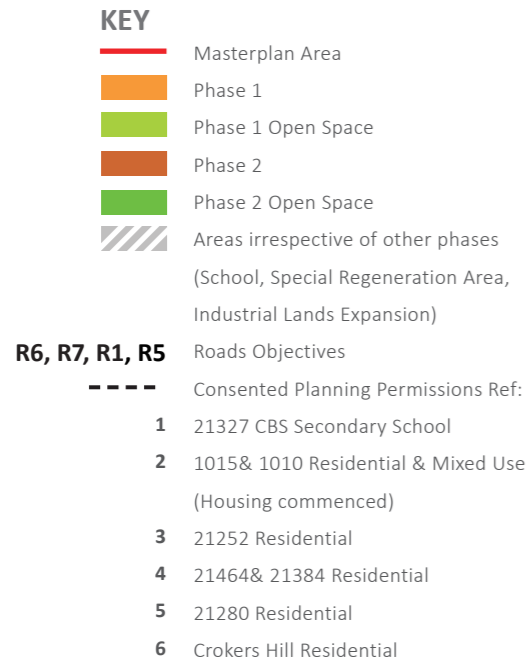


Fig. 6.16 Loughmacask Phasing

6.0 MASTERPLAN

NORTH

- KEY**
- Masterplan Area
 - Local Centre
 - Existing Residential
 - Special Regeneration Area
 - Residential
 - Industrial/Warehousing
 - Community Facilities
 - Amenity, open space, recreation
 - Existing Trees & Hedgerows
 - Existing Rivers & Lakes
 - Key Pedestrian/Cyclist Routes
 - Bus Routes
 - Future Western Bypass Corridor
 - Site Access
 - Future Access
 - Roads Objectives
 - City Landmarks



7.0 ENVIRONMENTAL CONSIDERATIONS

Environmental Mitigation

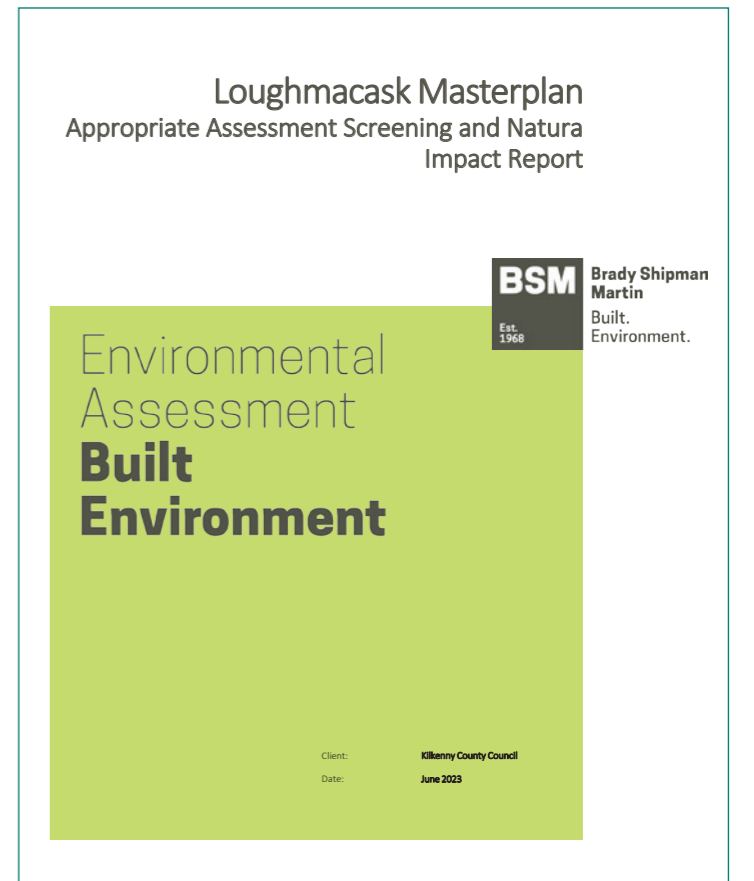
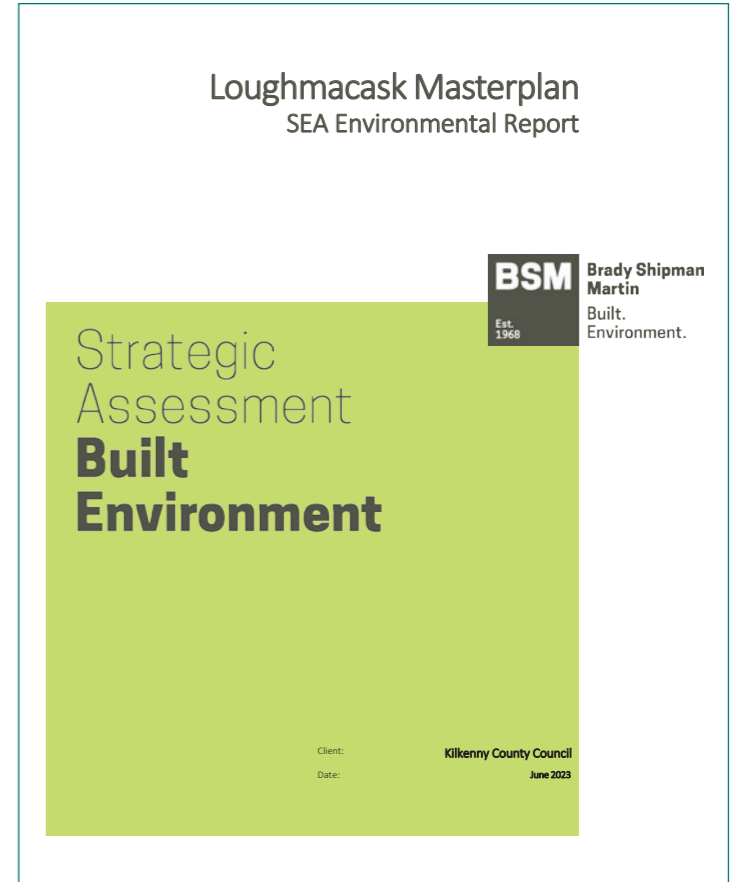
The Masterplan has been informed by the sensitivities of the receiving environment as identified herein and in the SEA Environmental Report. Various characteristics of the Masterplan proposals that will have the effect of avoiding and / or minimising potential adverse environmental effects. These include but are not limited to the following:

- The Masterplan provides the framework for a compact, planned new urban neighbourhood adjoining and integrated with the existing city centre; avoiding unplanned, one-off scattered or ribbon development at the urban-rural interface – and, therefore, minimising the impacts of unplanned urban sprawl and greenfield development, e.g. habitat loss.
- Vegetated setbacks and buffers will be retained around the River Breagagh and Lough Macask, providing for habitat conservation, reduced flood risk and safeguarding of water quality.
- The proposed green spine will buffer future residential development from the existing industrial facility (a Seveso site), Grassland Fertilizers.
- Mature hedgerows and treelines will be retained, and a network of green infrastructure created, safeguarding ecological corridors.
- The Masterplan proposals will promote sustainable mobility and reduce through traffic, thereby minimising environmental effects (including greenhouse gas emissions, noise and air quality impacts) associated with vehicles with internal combustion engines.
- Development of the Masterplan lands will incorporate a network of SuDS measures, including bio-retention swales, reducing flood risk and safeguarding water quality.
- The existing ‘Butts’ community will be integrated into the Masterplan area, avoiding community severance that may otherwise arise.

This Masterplan sits at a lower level in the planning and development hierarchy than the *Kilkenny City and County Development Plan 2021 – 2027*. The Masterplan lands are subject to the policies and objectives contained in the Development Plan, as well as the measures set out in the corresponding Natura Impact Report (NIR), SEA Environmental Report / Statement and Strategic Flood Risk Assessment (SFRA).

Many of the policies, objectives and development management requirements set out in the Development Plan will have the effect of mitigating the potential environmental effects of future development. These include but are not limited to the following key policies and objectives:

- Strategic Objective 2D: *To integrate appropriate mitigation and adaptation considerations and measures into all forms of development.* (p. 17)
- Strategic Objective 2F: *To adopt nature-based approaches and green infrastructural solutions as viable mitigation and adaptation measures to reduce greenhouse gas emissions where feasible. The Council will promote and support physical activity, active recreation and an active lifestyle.*
- Development Management Requirement: *To protect and where possible enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites.* (p. 130)
- Development Management Requirement: *To ensure that appropriate mitigation and/or compensation measures to conserve biodiversity, landscape character and green infrastructure networks are required in developments where habitats are at risk or lost as part of a development.* (ibid.)
- Development Management Requirement: *Require all developments in the early pre-planning stage of the planning process to identify, protect and enhance ecological features and habitats, and making provision for local biodiversity (e.g. through protection of existing breeding sites, and provision of appropriate new infrastructure such as swift, bat and barn owl boxes, bat roost sites, green roofs, etc.) and provide links to the wider Green Infrastructure network as an essential part of the design process.* (p. 131)
- Development Management Requirement: *To protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character of the county, and to ensure that proper provision is made for their protection and management, when undertaking, approving or authorising development.* (p. 133)
- Development Management Requirement: *To retain hedgerows, and other distinctive boundary treatment such as stone walls, when undertaking, authorising or approving development; where the loss of the existing boundary is unavoidable as part of development, to ensure that a new hedgerow is planted using native species, and species of local provenance to replace the existing hedgerow and/or that the wall is re-built using local stone and local vernacular design.* (ibid.)
- Policy: *It is Council policy to ensure the protection of architectural heritage by including all structures considered to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in the Record of Protected Structures.* (p. 146)
- Objective 10B: *To implement the measures of the River Basin Management Plan, including continuing to work with communities through the Local Authority Waters Programme to restore and improve water quality in the identified areas of action.* (p. 177)
- Policy: *It is Council policy to adopt a comprehensive risk-based planning approach to flood management to prevent or minimise future flood risk. In accordance with the Planning System and Flood Risk Management – Guidelines for Planning Authorities, the avoidance of development in areas where flood risk has been identified shall be the primary response. The Council will ensure that new developments do not reduce the effectiveness or integrity of any existing or new flood defence infrastructure, and will facilitate the provision of new, or the reinforcement of existing, flood defences and protection measures where necessary.* (p. 185)



7.0 ENVIRONMENTAL CONSIDERATIONS

Strategic Environmental Assessment (SEA)

The Loughmacask Masterplan has been subject to Strategic Environmental Assessment (SEA) in accordance with the requirements of Directive 2001/42/EC ('SEA Directive') 'on the assessment of the effects of certain plans and programmes on the environment', as transposed into Irish law via Statutory Instrument No. 435 of 2004 *The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004*, as amended by Statutory Instrument No. 200 of 2011 *European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011*.

Article 1 of the SEA Directive states that:

"The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment."

Therefore, SEA requires Member States of the EU to assess the 'likely significant environmental effects' of plans and programmes prior to their adoption.

The SEA for the Loughmacask Masterplan, which is set out on the SEA Environmental Report which accompanies the Masterplan, provides for the assessment of strategic environmental considerations of the masterplan at an early stage in the decision-making process.

Appropriate Assessment (AA)

The Loughmacask Masterplan has been subject to Appropriate Assessment (AA) in accordance with the requirements of Articles 6(3) and 6(4) of Directive 92/43/EEC (the Habitats Directive). A detailed assessment of the potential impacts on the integrity of European sites (also known as Natura 2000 sites) arising as a result of the implementation of the Masterplan was undertaken. Two European sites, the River Barrow and River Nore SAC and the River Nore SPA, are within the "zone of influence" of the Masterplan. The Masterplan is not connected with or necessary for the management of a European site, and screening for AA concluded that the Masterplan has the potential to have significant impacts on these two European sites.

Applying the "precautionary principle" therefore, and in accordance with Article 6(3) of the Habitats Directive, Stage 2 Appropriate Assessment is required.

To that end a Natura Impact Report (NIR) was prepared. The NIR, which accompanies the Masterplan, considered the potential impacts of its implementation on the integrity of the relevant European sites. It concluded, on the best scientific evidence, that it can be clearly demonstrated that no elements of the Masterplan will result in any impact on the integrity or Qualifying Interests/Special Conservation Interests of any relevant European site, either on their own or in-combination with other plans or projects, in light of their conservation objectives, provided mitigation measures are implemented.

Selected Environmental Legislation and Guidelines

In addition to the above the provisions of the Loughmacask Masterplan will have regard to, *inter alia*:

- Project Ireland 2040 – National Planning Framework
- Regional Spatial and Economic Strategy for the Southern Region
- Kilkenny City and County Development Plan 2021 – 2027 (KCC, 2021)
- Requirement, if any, for Screening for Environmental Impact Assessment (EIA)
- Requirement, if any, for Screening for Appropriate Assessment (AA)
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities (DoEHLG, 2009)
- Sustainable Drainage Systems (SuDS)
- Sustainable Residential Development in Urban Areas Guidelines for Planning Authorities (DoEHLG, 2009)
- Urban Design Manual - A Best Practice Guide (DoEHLG, 2009)
- National Adaptation Framework – Planning for a Climate Resilient Ireland (DoCCA, 2018)
- Kilkenny County Council Climate Change Adaptation Strategy 2019 to 2024
- Design Manual for Urban Roads and Streets (DoHLGH, 2019)
- Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters (IFI, 2016)
- Planning for Watercourses in the Urban Environment (IFI, 2020)
- Kilkenny Biodiversity Plan (KCC)
- Kilkenny County Council Pollinator Programme (KCC, 2019)
- Kilkenny Heritage Plan (KCC)
- Kilkenny Local Economic and Community Plan (KCC, 2016)
- Kilkenny Noise Action Plan (KCC, 2019-2023)

Site Specific Flood Risk Assessment (SSFRA)

A Site Specific Flood Risk Assessment (SSFRA) has been prepared in accordance with the OPW guidelines, the Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009) in respect of the Loughmacask Masterplan by AWN Consulting (refer to standalone report). Potential changes to the risk of flooding within the Masterplan area as a result of climate change have also been assessed in line with national guidance in the Climate Change Sectoral Adaptation Plan.

The conclusions of the SSFRA may be summarised as follows:

- All of the lands earmarked for residential development within the Masterplan area under the Development Plan are situated in Flood Zone C, where there is a low probability of flooding, and where development of this nature is regarded as 'appropriate', as per the OPW guidelines.
- Nevertheless, for development units located in Flood Zone C but adjoining or proximate to Flood Zones A or B (i.e. River Breaghagh Park), there is a potential future risk of flooding due to climate change.
- Additionally, groundwater flood mapping from the Geological Survey of Ireland (GSI) indicates that there is localised groundwater flooding at Lough Macask. While the medium probability flood zone is contained within lands earmarked for open space / amenity, the low probability (0.1% AEP) flood zone traverses Lousybush Lane and partially enters areas earmarked for residential and community (school) use.
- Development in the Masterplan area will incorporate sustainable drainage systems (SuDS) measures to mitigate flood risk and mitigation-by-design (e.g. finished floor levels above the 1-in-100 year fluvial flood level, and step-ups from road levels) to prevent ingress.

7.0 ENVIRONMENTAL CONSIDERATIONS

Sustainable Urban Drainage System

It is proposed to use a SUDS approach to storm-water management throughout the masterplan lands. SUDS implementation aims to provide an effective system to mitigate the adverse effects of urban storm water runoff on the environment by reducing runoff rates, volumes and frequency, reducing pollutant concentrations in storm water, contributing to amenity, aesthetics and biodiversity enhancement and allowing for the maximum collection of rainwater for re-use where possible.

SUDS features will aim to replicate the natural characteristics of rainfall runoff by providing control of run-off at source.

SUDS are mandatory under the guidelines, *'The Planning System and Flood Risk Management' 2009*.

The photos opposite and below illustrate an indicative range of potential water attenuation and drainage features that could be accommodated on the site.



Green roofs



Bio-retention swales



Bio-retention areas



Water detention ponds



Permeable paving

7.0 ENVIRONMENTAL CONSIDERATIONS



Fig. 7.1 Indicative SuDS Strategy

- Indicative bio-retention swales network
- Highest point 66m AOD

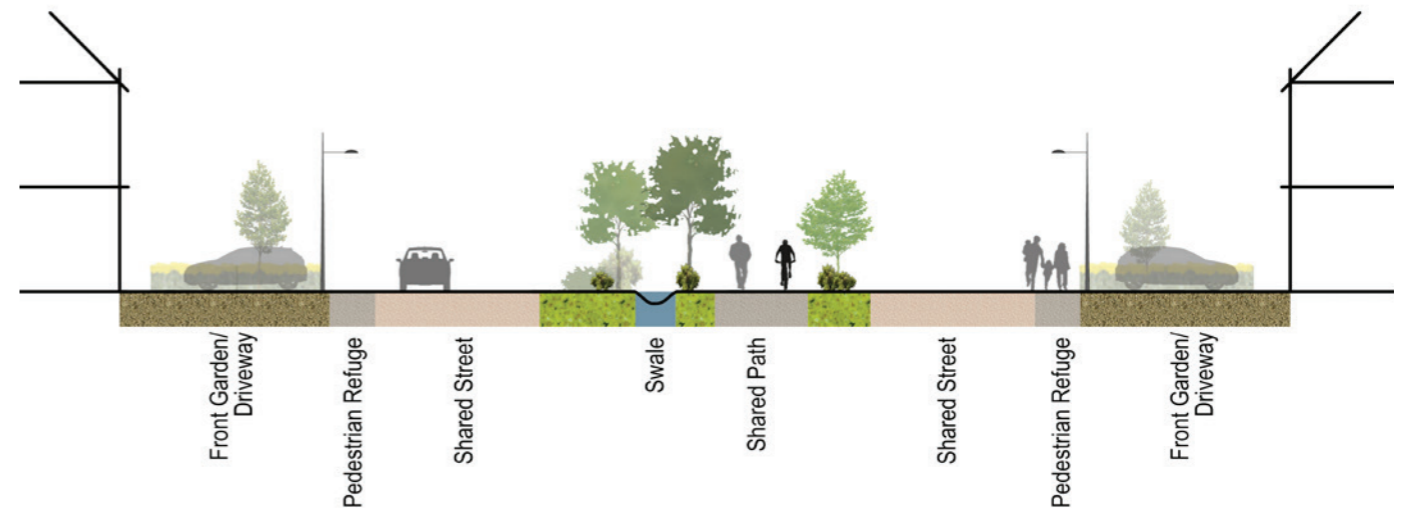


Fig. 7.2 A-A Linear Park /Green Link Swale

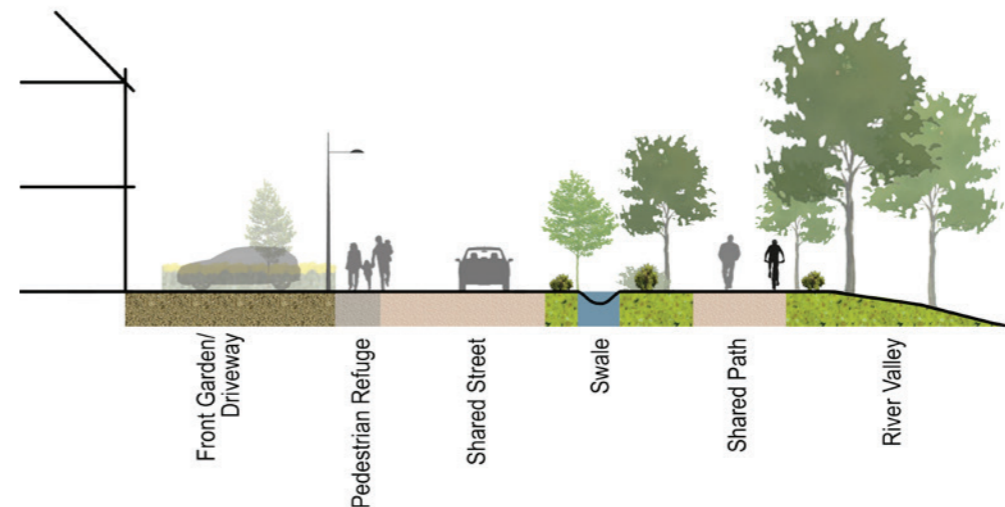


Fig. 7.3 B-B River Breagagh Valley Interface Swale