

CHAPTER 8

Transport & Infrastructure

8.1 Introduction

8.1.1 The quality of the infrastructure available within the county is of paramount importance in determining the quality of life for its citizens as well as being a major factor in attracting industry and employment to an area. Proper transportation, water, wastewater collection and treatment, solid waste management, power and broadband telecommunications constitute vital elements of this infrastructure.

8.1.2 One of the greatest difficulties faced by Kerry is its peripherality. The provision of proper external infrastructural linkages from the county to national and international infrastructural networks reduces the impact of peripherality and makes the county more attractive for the location of industry and as a location in which to live, work and provide employment. It is also necessary to provide local facilities such as water and waste treatment in order to provide the environment in which the county can grow both economically and socially.

8.1.3 Modern telecommunications, including the provision of broadband telecommunication infrastructure, is necessary for the development of the county and will be a major factor in attracting I.C.T. (Information and Communication Technologies) industries. The Council through the Development Plan will facilitate the provision of this infrastructure.

Objective No.	Transportation and Infrastructure
	It is an objective of the Council to:
INF 8-1	Improve the quality of life of all citizens of the county by providing good quality environment, energy, communication and transportation infrastructure.
INF 8-2	Facilitate the provision of the necessary infrastructure required to promote the sustainable development of the county.
INF 8-3	Facilitate the provision of the infrastructure necessary to cater for the needs of industry.
INF 8-4	Reduce the effects of peripherality by providing the necessary infrastructural linkages to external networks.
INF 8-5	Promote the provision of infrastructure in a sustainable manner having regard to the overall strategy and settlement strategy of this plan.

8.2 Transport

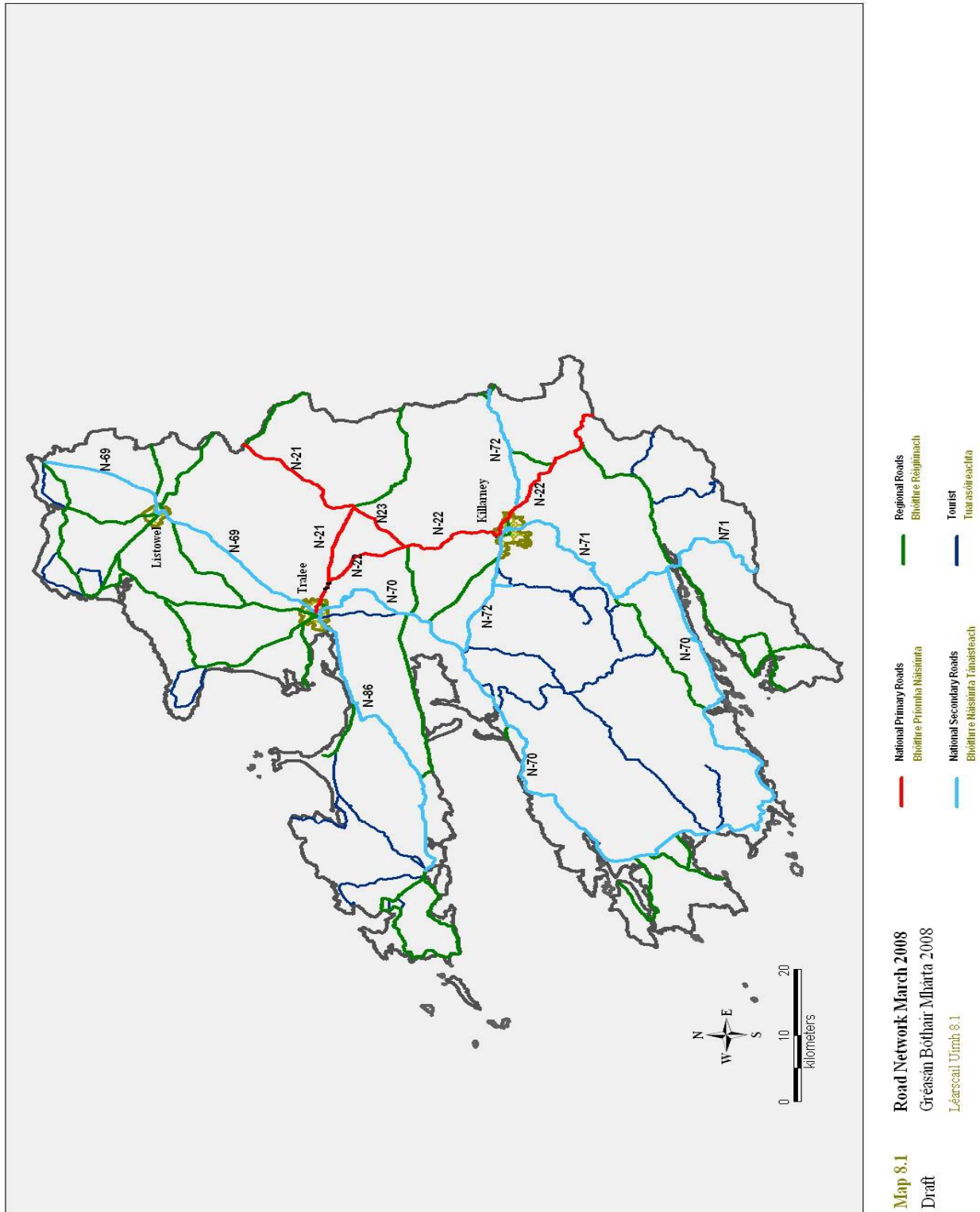
General Transportation

8.2.1 The Capital Investment Framework under the National Development Plan through which the transport system in Ireland will be developed over the period 2006 to 2015 is set out in the Government publication “Transport 21”. Transport 21 provides for the capital funding only for major infrastructural projects but is complimentary of other Government Initiatives such as the Rural Transport Programme and The Sustainable Travel and Transport Plan.

It is important to continue to develop the transportation infrastructure within the County of Kerry in order to improve the economic, physical and social well being of the county and its inhabitants. The continuing economic development of the county is dependent upon a good transportation network that is adequately and appropriately linked to the major urban centres and port regions. An adequate transportation network is required to maximise the efficiency of land-use and the transit of goods and people into, within and out of Kerry. This requires an integrated, sustainable and balanced approach between all aspects of travel including public and private transport systems, cyclist and pedestrian movements. In supporting the growth of local and urban development it is also essential to firmly integrate the future provision of the county’s transportation infrastructure, particularly public transport, within overall land use strategies.

8.2.2 Significant economic growth, and a consequent increase in car ownership throughout Ireland in recent years, has added to the pressures on the existing infrastructure. There are currently some 2.3 million vehicles on Irish roads which represents a 51% increase since 1998; with currently some 81,623 vehicles in Kerry. This will undoubtedly increase the number of persons using the road network.

Objective No.	General Transportation
	It is an objective of the Council to:
INF 8-6	<ul style="list-style-type: none"> a) Facilitate the movement of people and goods within the county. b) Improve access for people with disabilities to all modes of transport thereby increasing and improving transport facilities for people with disabilities.
INF 8-7	Provide good access to all main settlements so that people and goods can be transported in a safe and efficient manner.
INF 8-8	Maximise the beneficial return on investment in transport infrastructure by protecting the carrying capacity of all routes in the interest of value for money and public safety.
INF 8-9	<ul style="list-style-type: none"> a) Increase the emphasis on public transport in accordance with the principles of sustainability. b) Protect and develop the county’s principal transportation assets including ports, Kerry airport and strategic road and rail corridors. c) Promote the development of all transportation links both within and out of the county in co-operation with the three Town Councils of Tralee, Listowel and Killarney as well as Limerick County Council and Cork County Council so as to integrate the different modes of transport.



Road Network

8.2.3 With a population of 139,835 constituting 3.3% of the National Population, Kerry County Council is responsible for 3.5% of the Country's National Primary, 12.6% of the National Secondary, 4.5% of the regional and 4.7% of the local road network.

	Country	Co. Kerry	%
National Primary	2739	96	3.5
National Secondary	2676	336	12.6
Regional	11645	524	4.5
Local	79446	3757	4.7

The low density of population in Kerry and the relatively low level of urbanisation account for a high dependency on the county's road infrastructure. County Kerry must continue to improve the quality of the existing transportation network in order to provide a stronger and more viable economic base for local development.

8.2.4 In developing the road network of the county the safety of all road users must always be a priority. In the period since 2003 substantial investment has been made and improvements carried out to the county's road network.

Table 8.1 identifies the road accident statistics for County Kerry between 2004 and 2007. This outlines the on-going incidence of road accidents that are still occurring.

Table 8.1 Road Accident Statistics County Kerry 2004 - 2007				
	2004	2005	2006	2007
Fatal Accidents	14	11	21	13
Serious Injury Accidents	20	25	24	25
Minor Injury Accidents	130	183	216	216
Material Damage Accidents	618	808	1105	1271
No. Persons with serious injury through road accidents	33	43	51	40
No. persons with minor injury through road accidents	198	277	325	340

Table 8.2 summarises the road network and traffic flow in the county.

Table 8.2 Road Type	% of Network	Traffic Flow
National Primary	2%	24%
National Secondary	7%	11%
Regional	11%	24%
Local	80%	41%

Objective No.	Transportation and Infrastructure
	It is an objective of the Council to:
INF 8-10	<p>a) Improve the Road Network through the construction and maintenance of both National and Non-National Roads to the highest standard and in an environmentally sensitive manner.</p> <p>b) Upgrade and improve the road network linking the smaller settlements throughout the county with their principal towns as identified in the settlement hierarchy for the county.</p>
INF 8-11	Reserve lands needed for both the immediate and long-term provision and improvement of roads throughout the county, and the construction of relief roads as indicated in the adopted local area plans.

Objective No.	General Roads
	It is an objective of the Council to:
INF 8-12	<p>Safety Manage the road network serving settlements in an economic and efficient manner with particular emphasis on safety for all road users by</p> <p>a) Minimising or removing existing traffic hazards</p> <p>b) Providing appropriate signage</p> <p>c) Preventing the creation of additional or new traffic hazards</p> <p>d) Formulating and adopting a Kerry County Council Road Safety Strategy at three-yearly intervals.</p> <p>e) Implementing Traffic calming measures where appropriate.</p>
INF 8-13	<p>Road Improvements Identify key local priorities for road improvements.</p>
INF 8-14	<p>Protection of the road network Protect the road network by implementation of the relevant legislation. This relates particularly to the 1993 Roads Act and the adoption of relevant road policies. A dedicated Roads Enforcement Officer will be utilized to protect the network.</p>

National Routes

8.2.5 The National route network comprises both the National Primary routes and the National Secondary routes within the county. These routes are of vital economic importance, linking the county with other major centres and ports, and are important arteries within the county itself. Although they account for only 9% of the overall road network they account for 35% of traffic movements and are of particular importance to the carriage of goods and services. It is stated National Policy to restrict access onto National Routes.

It is an overall objective of the Plan to provide for balanced growth throughout the county by promoting the strengthening of rural communities and to provide the infrastructure to facilitate job creation in these areas. The road network throughout the county and particularly the national road network is a vital element of this infrastructure. It is essential that they are maintained to the highest standards possible and that their efficiency, safety and carrying capacity is maximised. The creation of additional entrances onto these roads reduces their carrying capacity and safety and is contrary to the overall objective of improving the infrastructure serving rural areas. This plan, therefore, proposes to limit the number of new entrances onto the national road network.

8.2.6 Applications for development accessing National roads will be referred to the National Roads Authority for their recommendations regarding junction assessment and safety audit. Applications will be required to comply with the recommendations of the National Roads Authority and, in particular to the NRA Policy Statement on Development Management and Access to National Roads (May 2006).

8.2.7 National Primary Roads are the major long distance through routes linking the principal ports and airports, cities and large towns. Heavy Goods Vehicles (HGV's) constitute a large number of vehicle movements on the National Primary Roads with 12% on the N 21, 11% on the N 22 and 13% on the N 23.

Table 8.3 indicates the National Primary Road network.

Table 8.3	National Primary Routes
N 21	Tralee – Castleisland – Feale's Bridge, Limerick County Bounds
N 22	Tralee – Killarney – Clonkeen, Cork County Bounds
N 23	Castleisland - Farranfore

Total Length: 96 Km

8.2.8 National Secondary Roads are medium distance through-routes connecting important towns, serving medium to large geographical areas and creating links to the national primary roads to form a homogenous arterial network. In County Kerry the National Secondary Road network is as follows:

Table 8.4	National Secondary Routes
N 67	Tarbert Island – Tarbert
N 69	Tralee – Listowel – Tarbert to Limerick County Bounds
N 70	Tralee – Killorglin – Cahersiveen – Kenmare
N 71	Killarney – Kenmare (Tunnels) – Cork County Bounds
N 72	Rathmore – Lissivigeen Cross and Killarney to Killorglin
N 86	Tralee – An Daingean

Total Length: 336 km

Objective No.	National Routes
	It is an objective of the Council to:
INF 8-15	Construct new National roads along the routes listed in table 8.5
INF 8-16	Prohibit development on lands which will be needed for the construction of the routes listed in table 8.5 and/or identified on Maps 8.2 – 8.10.
INF 8-17	Prohibit development in areas identified as study corridors for the route selection of National Primary roads, as identified on Maps 8.2 – 8.10 until such time as a particular route has been identified.
INF 8-18	Achieve an average inter-urban speed of 80 km/hr on all national routes, where resources permit, by continuing to upgrade them to the best modern standards and to maintain that standard thereafter.
INF 8-19	Improve the surface and horizontal and vertical alignment of the National Secondary Routes throughout the County.
INF 8-20	Prohibit the provision of new development onto National Primary and National Secondary roads except for the particular instances outlined in Paragraph 8.2.9 of this plan.
INF 8-21	Support the construction of the N21 Abbeyfeale to Adare Road Improvement Scheme and associated routes in conjunction with Limerick County Council.
INF 8-22	Ensure that developers of lands adjacent to planned national roads shall be responsible for any mitigation measures required. The developer shall provide a written undertaking confirming that Kerry County Council will not be responsible for any mitigation measures necessary to offset any impacts (e.g. noise, visual amenity and privacy) that the proposed road scheme may have on the development.
INF 8-23	Ensure that any change to the layout of a national road shall require a Safety Audit approved by the NRA.
INF 8-24	Ensure that Traffic and Transport Assessments shall be in accordance with the NRA Traffic and Transport Assessment Guidelines (September 2007)

Table 8.5	
Proposed New Roads	
National Primary	
N21	Abbeyfeale to Adare (Portion in Co. Kerry)
N21/N23	Castleisland By-pass
N22	Tralee By-pass
N22	Tralee to Bealagrellagh
N22	Farranfore / Killarney Bypasses
N23	Castleisland to Farranfore
National Secondary	
N69	Listowel By-Pass
N70	Coolnabaragill Lower to Coolroe
N70	Milltown Bypass
N70-N71	Kenmare Link Road
N70-N72	Killorglin Relief Road
Connection from N22 to N70 (Muckcross Road)	
Non National Roads	
Tralee Western Ring Road	
Tralee Northern Link Road (Phase 2)	
Tralee Link Road (Phase 3)	
An Daingean Relief Road	
Ballybunnion Inner Relief Road	
Cahersiveen Inner Relief Road	
Castleisland Inner Relief Road	
Kenmare Inner Relief Road	
Tarbert Inner Relief Road	
Milltown Eastern Relief Road	

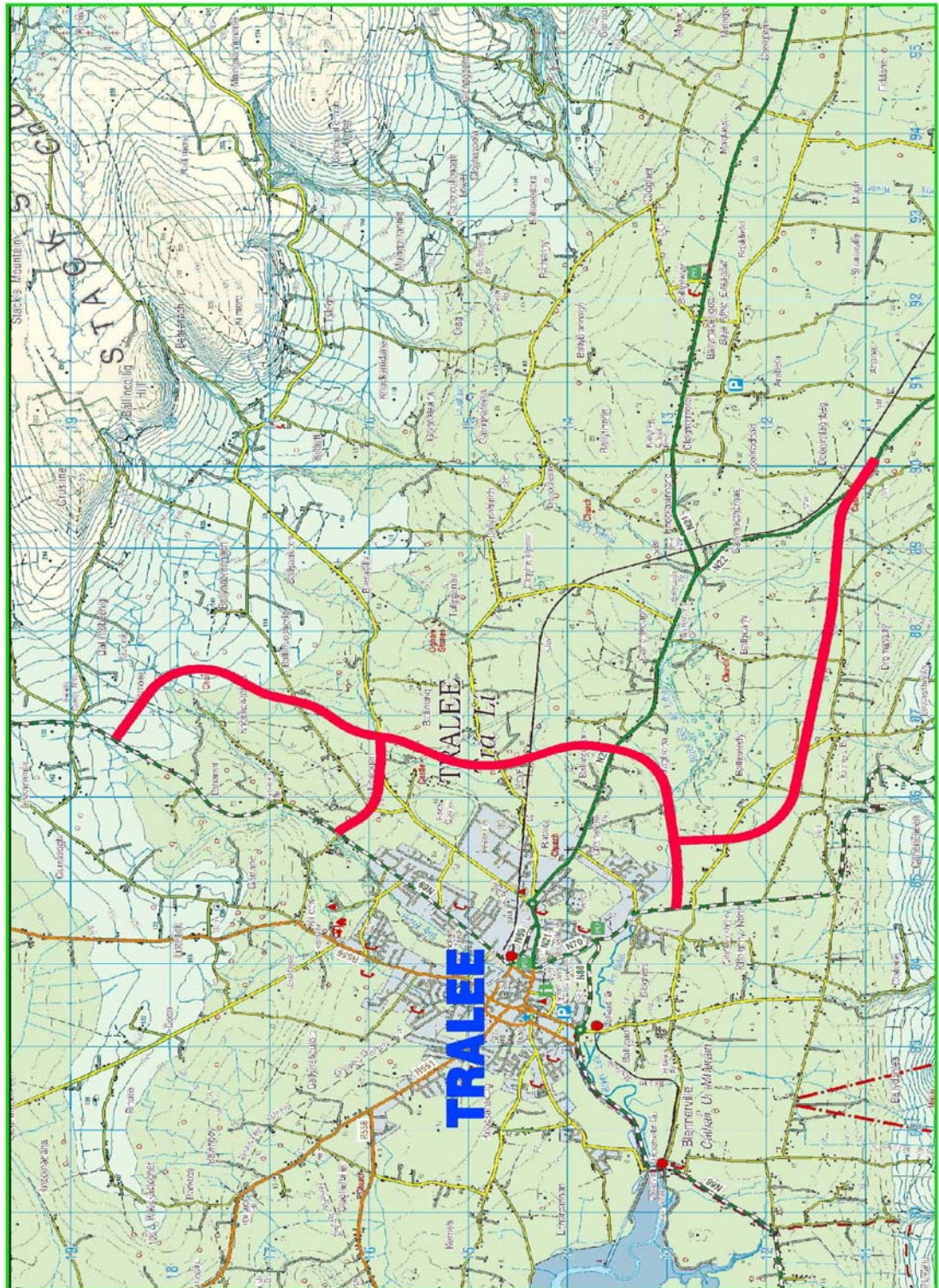
MAP 8.2

N22 Tralee Bypass/Tralee to Bealagrellagh

N22 Seachbhóthar Thrá Lí/Trá Lí go Béal Átha Greallach

Léarscáil Uimh

- National Primary Road
Bóthar Náisiúnta Príomhúil
- - - National Secondary Road
Bóthar Náisiúnta Tánisteach
- Proposed New Road
Bóthar Nua Mulla

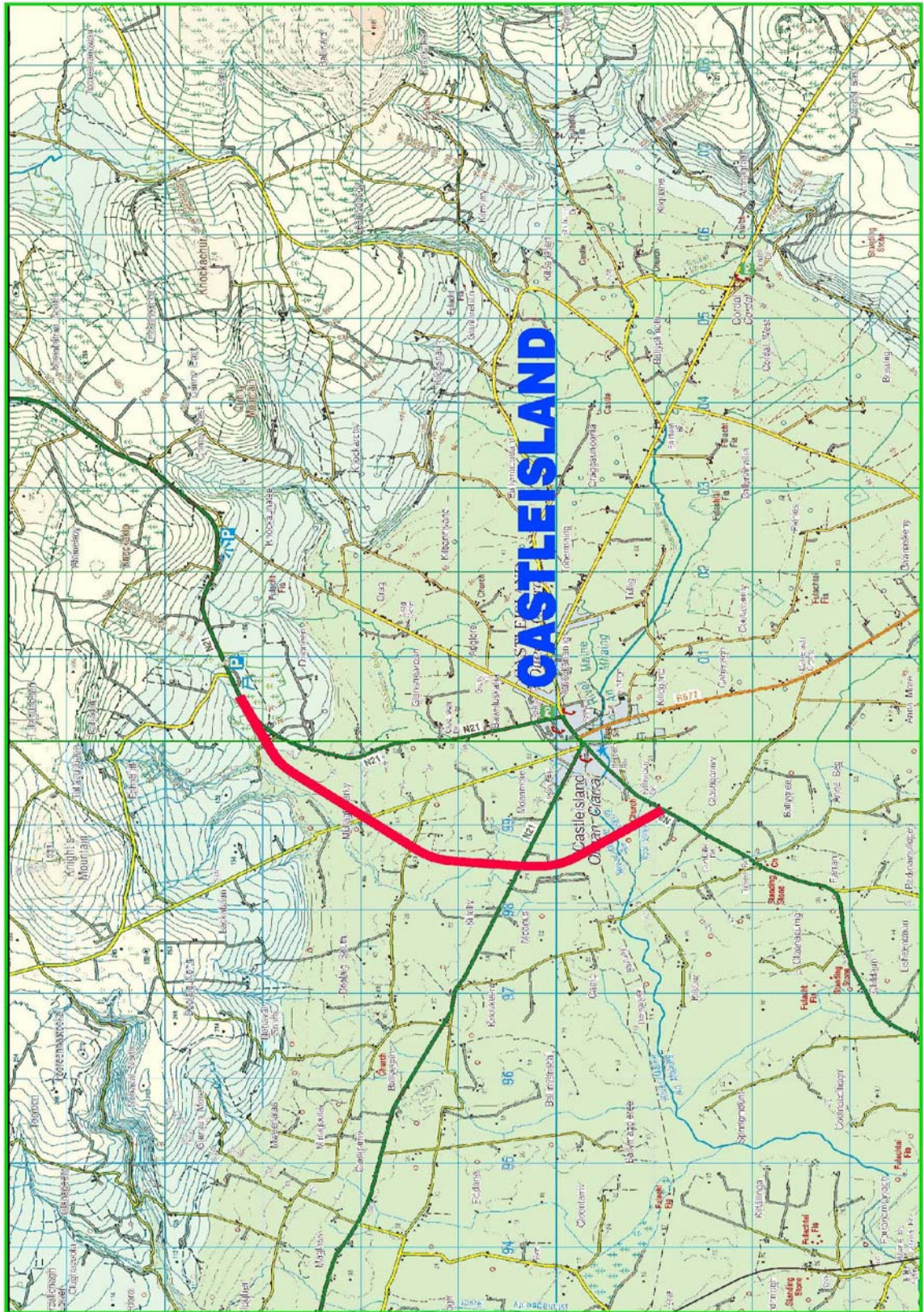


MAP 8.3

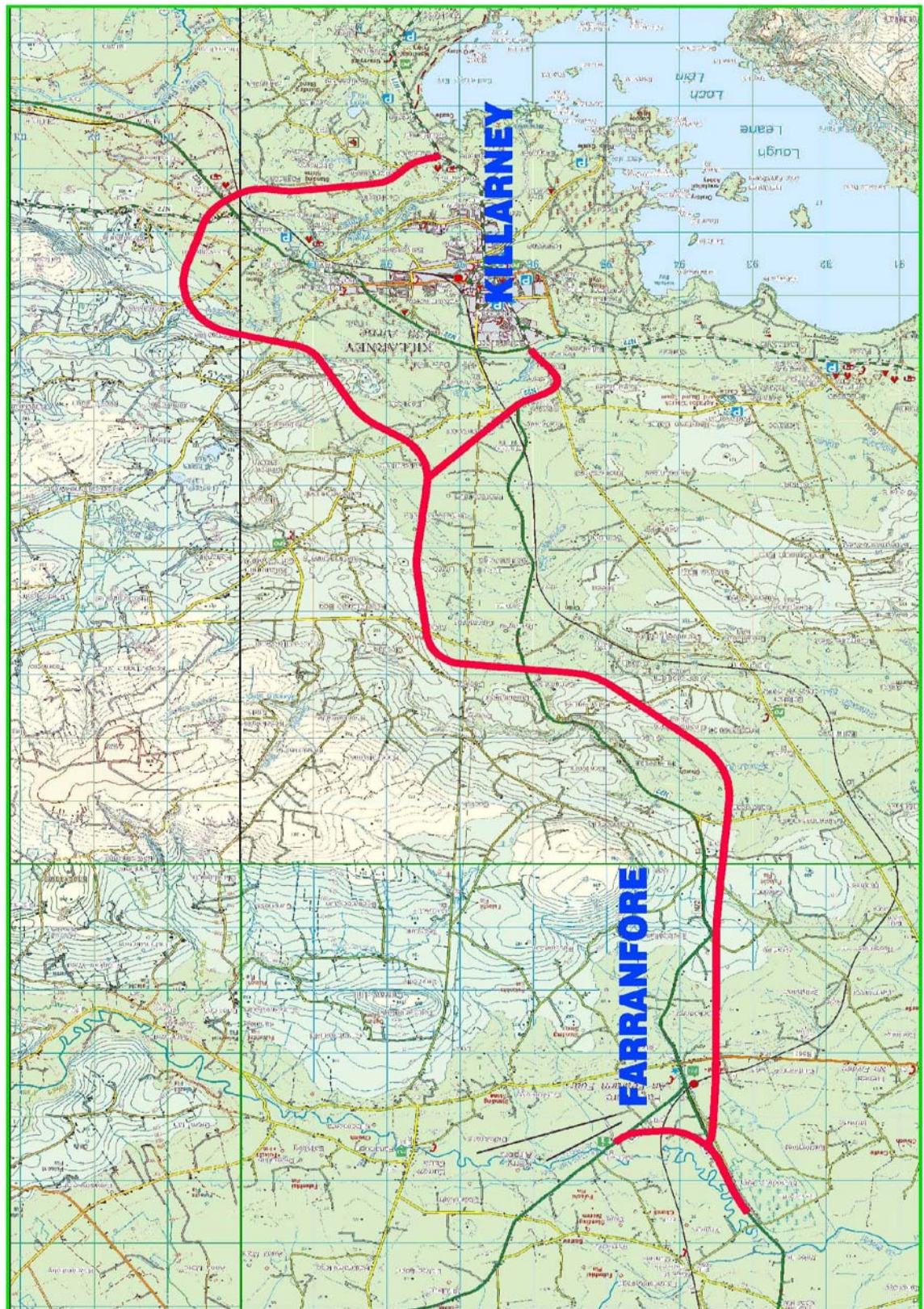
N21/N23 Castleisland Bypass N21/N23 Seachbhóthar Oileán Chiarraí

Léarscáil Uimh

-  National Primary Road
Bothar Náisiúnta Príomhúil
-  National Secondary Road
Bothar Náisiúnta Tánaisteach
-  Proposed New Road
Bothar Nua Mulla



MAP 8.4 N22 Farranfore to Killarney
N22 An Fearann Fuar go Cill Aime
Léarscáil Uimh



MAP 8.5

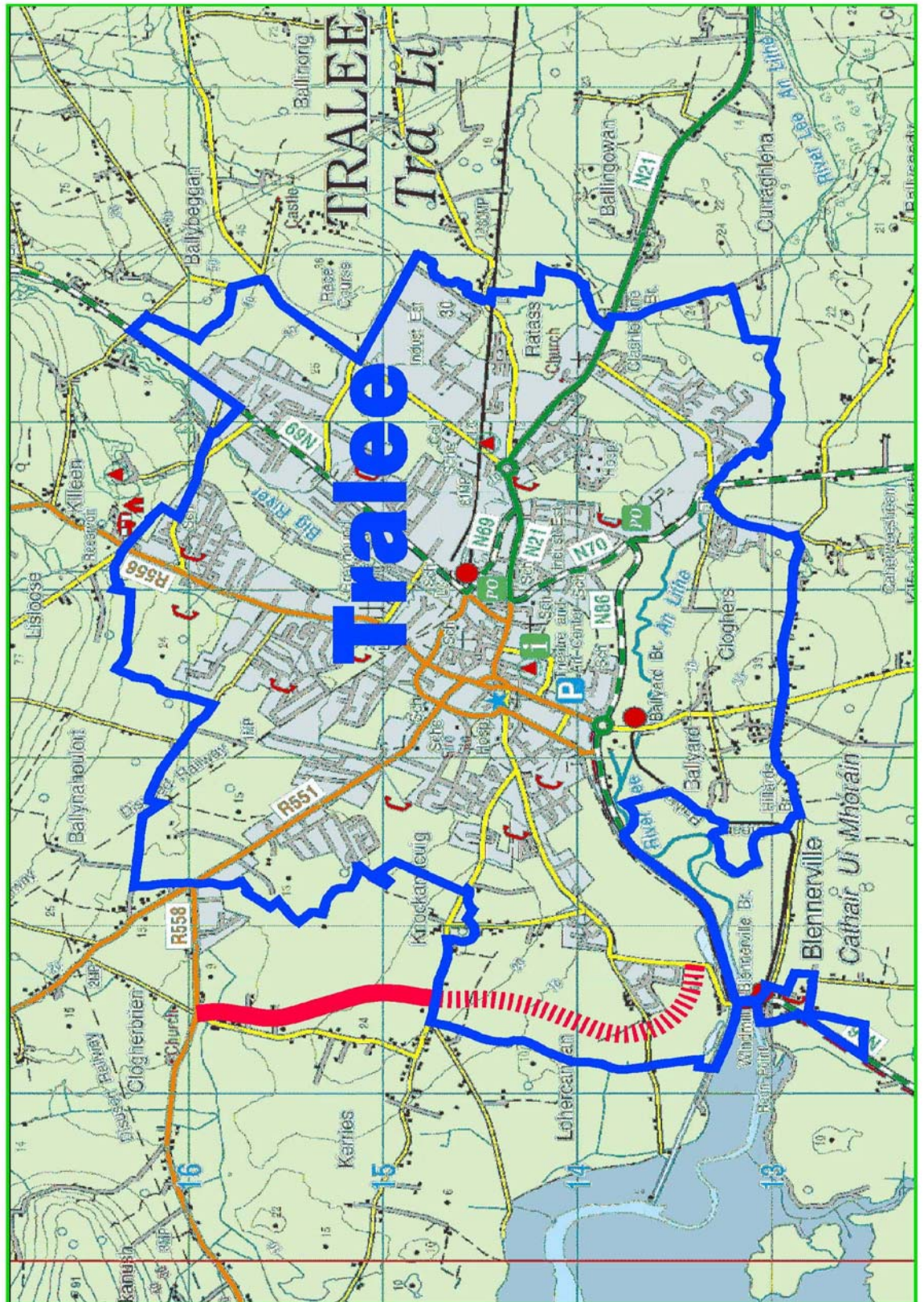
Tralee Western Ring Road

Cuarbhóthar Thiar Thrá Lí

Léarscáil Uimh

- Tralee Town Boundary
Cíoch Comhairle Baile Thrá Lí
- Proposed New Road (Kerry Co Council).
Bóthar Nua Mulla (Comhairle Contae Chiarraí)
- - - Proposed New Road (Tralee Town Council)
Bóthar Nua Mulla (Comhairle Baile Thrá Lí)

- National Primary Road
Bóthar Náisiúnta Príomhúill
- - - National Secondary Road
Bóthar Náisiúnta Tionúisceach

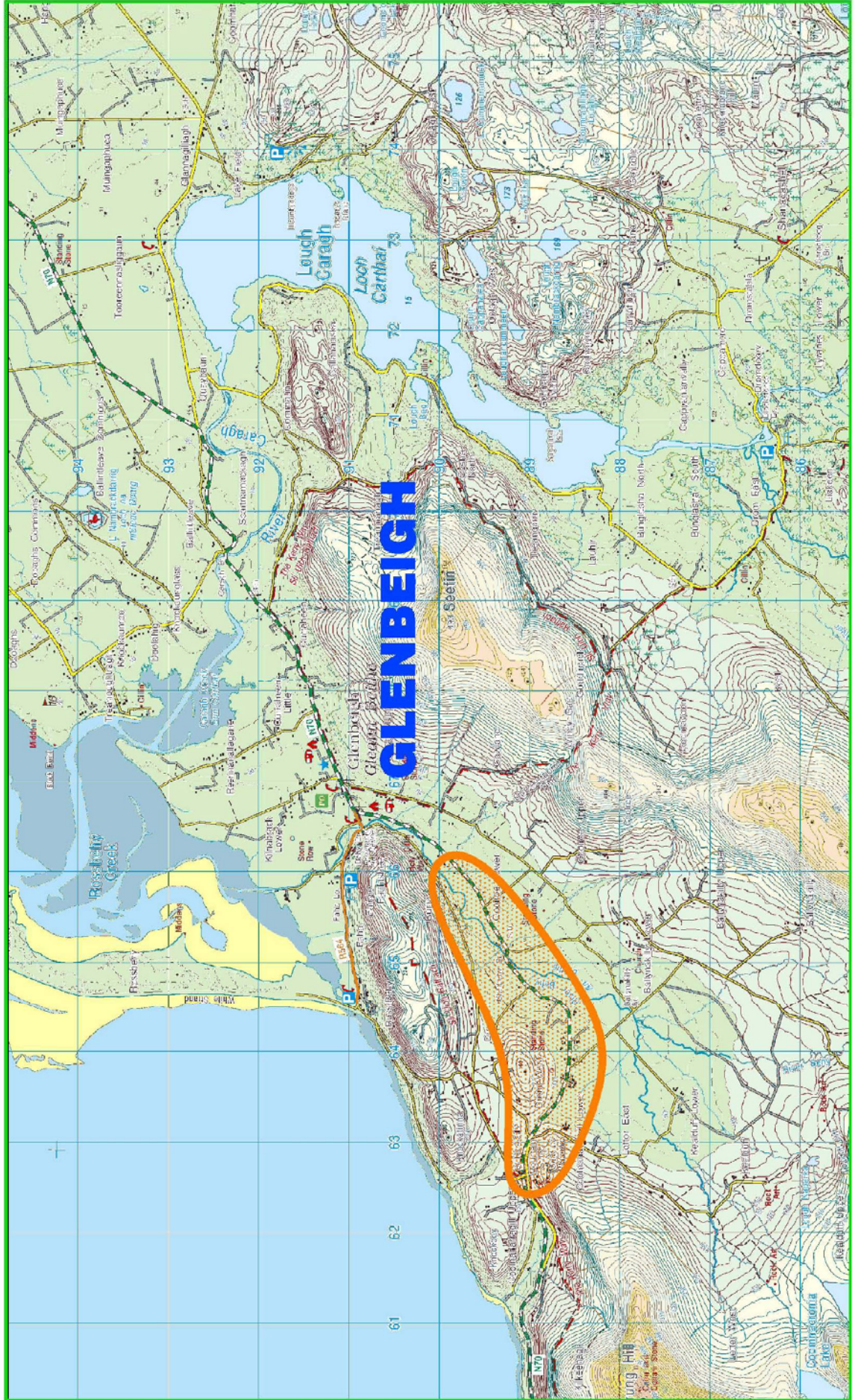


MAP 8.6 N70 Coolnaharragill Lower to Coolroe Lower

N70 Cúil na hAgaile Íochtarach go Cúil Rua Íochtarach

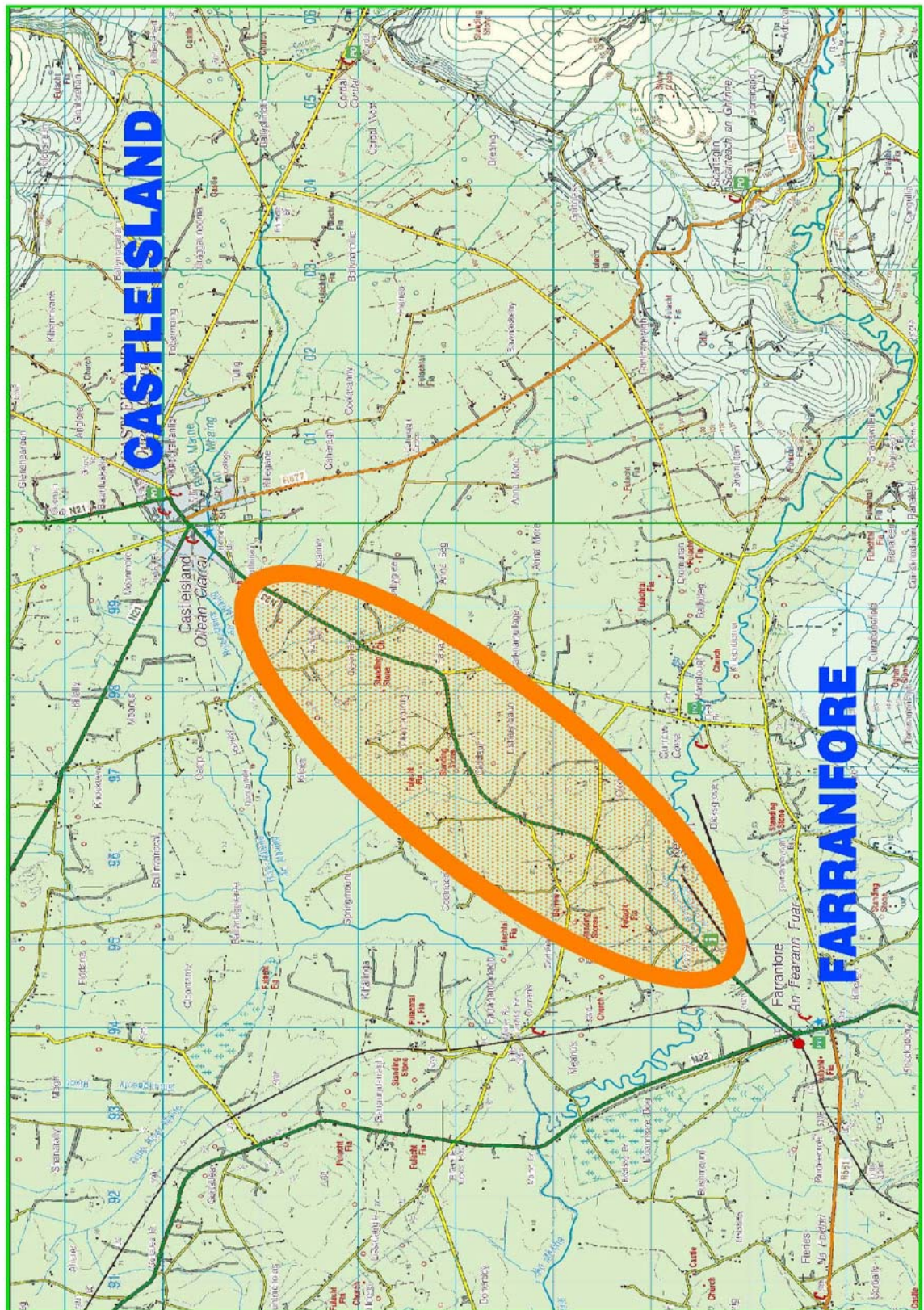
Léarscáil Uimh

-  National Primary Road
Bóthar Náisiúnta Príomhúil
-  National Secondary Road
Bóthar Náisiúnta Tánaisíeach
-  Study Area
Limistéar Staidéir



MAP 8.7 N23 Castleisland / Farranfore
N23 Oilean Chiarraí go Faerann Fuar

Léarscáil Uimh



MAP 8.8

N69 Listowel Bypass

N69 Seachbhóthar Lios Tuathail

Léarscáil Uimh

-  National Primary Road
Bóthar Náisiúnta Príomhúil
-  National Secondary Road
Bóthar Náisiúnta Tánaisleach
-  Study Area
Limistéar Staidéir



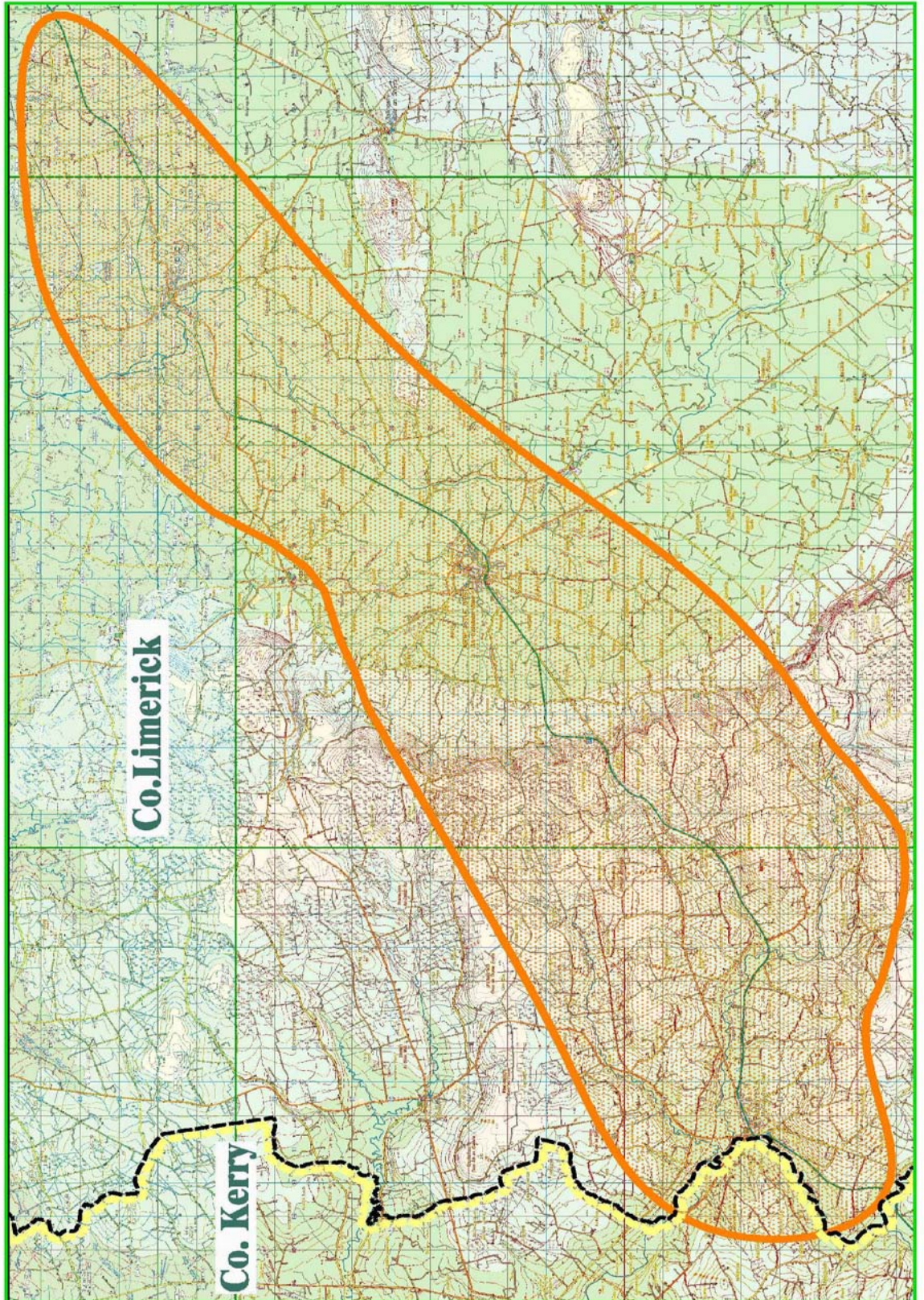
MAP 8.9

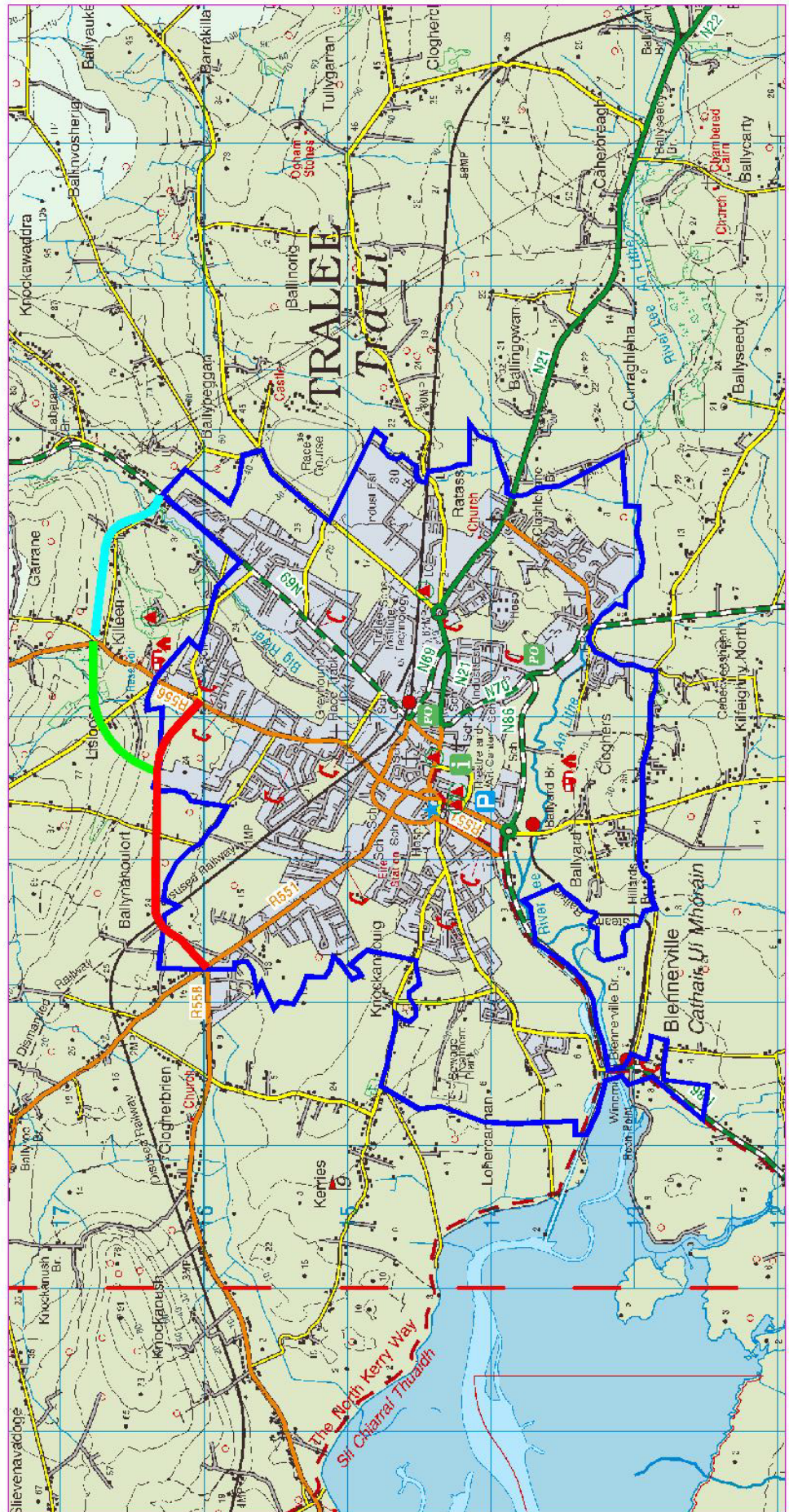
N21 Abbeyfeale to Adare

N21 Mainistir na Féile go hÁth Dara

Léarscáil Uimh

-  National Primary Road
Bothar Náisiúnta Príomhúil
-  National Secondary Road
Bothar Náisiúnta Tánalsteach
-  Study Area
Limistéar Staidéir
-  Kerry / Limerick Co. Bounds





Applications for development within study corridors or adjacent to chosen routes for National Roads will be referred to the National Roads Authority for their observations.

8.2.9 In accordance with Objective INF 8-19 new accesses onto National Primary and National Secondary roads will not be permitted except in the following circumstances:

1. Developments in areas where the 50 kph or equivalent speed limit applies.
2. Large-scale industrial or commercial developments that are tied to a fixed resource and are considered to be of extreme economic necessity to the area and the county.

In relation to these exceptions the Planning Authority will require to be satisfied that the developer will incur the costs of any upgrading necessary to safeguard the carrying capacity and free flow of movement on the National route, and to comply with the relevant sight distances outlined in the NRA Design Manual for Roads and Bridges.

Regional Roads

8.2.10 Regional Roads (total length: 524 km) are the main link routes between National roads and link the larger towns and villages. The following routes are important access routes to major towns within the county.

Route No.	Description
R549	An Muirioch – An Fheothanach – An Daingean
R550	Kilmore Cross – Srón Bhroin
R551	Tarbert – Ballybunion – Tralee
R552	Ballylongford – Listowel
R553	Listowel – Ballybunion
R554	Ballyconry – Lisselton
R555	Listowel Abbeyfeale
R556	Ballyduff – Tralee
R557	Abbeydorney – Listowel
R558	Tralee - Fenit
R559	An Daingean – Ceann Sleibhe – Baile an Fheirtearaigh
R560	Camp – An Conair, An Daingean
R561	Farranfore – Castlemaine – Annascaul
R563	Fossa – Milltown
R564	Glenbeigh – Rossbeigh
R565	Caherciveen – Portmagee - Knightstown
R566	Kilcolman – Baile an Sceilg – Portmagee
R567	Kineigh Cross – Emlaghmore
R568	Sneem – Moll's Gap
R569	Kenmare – Poulgorm
R570	Glenflesk – Barraduff
R571	Kenmare – Castletownbere
R573	Tousist – Lauragh
R574	Dereen – Healy Pass
R576	Wellesley Bridge – Breanagh Bridge
R577	Castleisland - Ballydesmond
R582	Nohoval Bridge – Rathmore – Inchibeg Bridge
R874	North Circular Road, Tralee
R875	Castle Street, Tralee
R876	Park Road and High Street, Killarney
R877	Port Road, Killarney
R919	Killerisk Road, Tralee

Objective No.	Regional Routes
	It is an objective of the Council:
INF 8-25	To continue to maintain, improve and upgrade all regional roads within the county as resources permit and to maintain that standard thereafter.
INF 8-26	That applications for development shall comply with the standards (sight distances, boundary treatment, surface water etc.) specified in Chapter 13 of the plan in relation to Development Management.

Local Roads

8.2.11 Local Roads (total length: 3757 km) includes all remaining public roads other than National and Regional routes.

Objective No.	Local Roads
	It is an objective of the Council:
INF 8-27	To continue the ongoing upgrading, strengthening and improvement works on all local roads, including <ul style="list-style-type: none"> • The road surface quality, • Providing sight distance at bends and junctions, • Providing passing areas, • Narrow sections of local routes • Improving the roads and footpaths in and on the approaches to all towns and villages within the county, in particular where identified in the Local Area Plans, and to maintain that standard thereafter where the need arises and where resources permit.
INF 8-28	That applications for development shall comply with the standards (sight distances, boundary treatment, surface water etc.) specified in Chapter 13 of the plan in relation to Development Management.

Tourist Routes

8.2.12 Tourist routes for the county are indicated on Map 8.1

Objective No.	Tourist Routes
	It is an objective of the Council to:
INF 8-29	Upgrade and improve the major tourist routes within the county. Improvements shall include the provision of lay-bys, viewing areas, picnic areas and the improvement of finger-posting and access ways to points of interest along such routes.

Cyclists, Pedestrians & Rights of Way

An essential element of any integrated transport system is to provide for the needs of cyclists and pedestrians. Part of the Government's sustainability development strategy, Sustainable Development – A Strategy for Ireland, identifies the increased provision of cycle lanes and safer facilities for pedestrians as a key priority. Cycleways and safe pedestrian routes should be encouraged as part of the design schemes for residential, educational, employment and recreational development. Provision of such routes promotes physical health and the tourism industry and as a consequence is of benefit to the local economy. It is important that cyclists and pedestrians have safe and efficient access to public transport. In providing for pedestrians (both local and tourist alike), the Council will ensure accessibility for persons with disabilities in accordance with the provisions of the Disability Act 2005, Government Sectoral Plans and Kerry Local Authorities "Access for All Plan 2008-2015".

Objective No.	Cyclists, Pedestrians & Rights of Way
	It is an objective of the Council to:
INF 8-30	<ul style="list-style-type: none"> a) Make improvements to the design of roads in urban areas to accommodate the needs of cyclists, pedestrians, and persons with disabilities. b) Continue to improve the roads and footpaths in and on the approaches to all towns and villages within the county. c) Facilitate the provision of recreational pedestrian and cycle routes throughout the county.
INF 8-31	Safety & Design Encourage cycleways and safe pedestrian routes as part of the design schemes for residential, educational, employment and recreational development.
INF 8-32	Rights of Way Preserve where possible established public Rights of Way, to promote the way-marked ways network within the County and, subject to proper consultation in advance with landowners, to give general support to increased access to open areas including uplands and coastlines.

Car Parking

The provision of adequate car parking throughout the County is essential for the proper functioning of settlements and access to services. It is important that in the siting and design of new car parks, that efforts are made to maintain the quality of the public domain.

Objective No.	Car Parking
	It is an objective of the Council to:
INF 8-33	a) Provide new and improve existing public parking areas. Such areas shall be provided as part of an overall traffic management scheme. b) Introduce pay parking to fund the provision of car parks as required. c) Facilitate the provision of 'park and ride' facilities for the major towns throughout the county
INF 8-34	Provide disabled parking bays when improving / providing car parks or on-street parking facilities.

Traffic Management

Objective No.	Traffic Management
	It is an objective of the Council to:
INF 8-35	Traffic Management Plans It is an objective of the Council to prepare and implement new, and improve existing, Traffic Management Plans for towns and villages as the need arises.
INF 8-36	Delivery plans/schedules in urban areas It is an objective of the Council to assess and where appropriate, regulate the delivery plans/schedules to urban areas so as to alleviate traffic congestion.

Rail Network

8.2.13 In terms of upgrading and improving the rail system, the following improvements are planned to take place within the Plan period:

1. All services on the Mallow / Tralee line will be replaced by new state-of-the-art Intercity railcars offering the highest levels of passenger service
2. Service frequency will be enhanced to give an overall 2 hourly service
3. Design will commence for car park expansion schemes at Killarney and Tralee.

Objective No.	Rail Network
	It is an objective of the Council to:
INF 8-37	Maximising the Potential a) Safeguard existing stations and their associated infrastructure, their access and the surrounding lands, against encroachment by inappropriate uses which could compromise their future development as a rail facility. b) Safeguard the potential for disused railway infrastructure to be reused. c) Facilitate development which maximises the potential use of the railway network. d) Promote the development of a more flexible, efficient rail service in the 'Tralee / Killarney corridor'.
INF 8-38	Developing 'green routes' Develop a network of 'green routes' along former railway routes to be used for cycleways, walkways and other recreational activities.
INF 8-39	Rail Improvements Support the continued upgrading and improvement to the Tralee / Mallow line in order to shorten journey time on that route.

Ports, Harbours and Piers

8.2.14 The establishment and maintenance of the piers, ports and harbours of the County are important to the local economic base of an area. There are many such facilities located along the length of the Kerry coastline, the major commercial ports being Fenit and An Daingean. These are especially important in terms of their fishing and commercial base and should be encouraged to develop further.

Some of the piers along the coastline provide ferry facilities to neighbouring counties, ports and offshore islands as well as supporting local mariculture and leisure activities. Continued investment is required to further develop this infrastructure and to support local industry and tourism.

Objective No.	Ports, Piers and Harbours
	It is an objective of the Council to:
INF 8-40	<p>Port Improvements</p> <ul style="list-style-type: none"> a) Improve pier, port and harbour infrastructure in the county. b) Safeguard lands in the vicinity of ports and harbours against inappropriate uses that could compromise the long-term economic potential of the port or harbour. c) Maintain and improve infrastructural links to the county's ports. d) Make provision for the establishment of new ports. e) Facilitate the development of appropriate marine leisure infrastructure. f) Continue to ongoing maintenance, protection and construction of the piers throughout the County in accordance with the programme and funding of the Roads and Transportation section of Kerry County Council. <p>Facilitate improved access to new and existing ports, piers and harbours.</p>

Airport

8.2.15 Kerry Airport located at Farranfore has been in operation since 1969. The airport is strategically located in the centre of the Tralee-Killarney Hub mid-way between the two main population centres of Tralee and Killarney and is adjacent to the National Primary Road network thereby making the airport easily accessible to the centres of tourism and commerce throughout the county.

8.2.16 The airport is an important strategic asset to the county in strengthening transportation links both nationally and internationally. It is envisaged that future upgrading of the airport facilities will increase the potential for the airport to attract increased passenger numbers thereby making the county more accessible to other centres.

8.2.17 Overall, there has been a two and a half-fold increase in passenger numbers at Kerry airport over the past 8-year period. This reflects the airport's significance as a regional airport.

Objective No.	Airport
	It is an objective of the Council to:
INF 8-41	<p>Maximising Potential</p> <p>Support and encourage the development of Kerry airport and to utilise the airports potential as a means of generating additional investment in the county.</p>
INF 8-42	<p>Safety</p> <p>Ensure that no new development will be permitted which will extend within the airspace volume as defined by the obstacle limitation surfaces for the airport. In this regard the Council will adhere to the advice of the Irish Aviation Authority.</p>

8.3 Waste Management

National Waste Policy

The provision of a properly regulated, environmentally sustainable waste management infrastructure is a critical element of the County's infrastructure. Aside from protecting the natural environment it forms an integral part of the infrastructure necessary for industries to operate within the county in an environmentally sustainable manner. The availability of such infrastructure can be an important element of an industries decision to locate in an area.

8.3.1 The Government's policy on waste management is set out in the following documents published by the Department of the Environment, Heritage and Local Government:

- 'A Policy Statement on Waste Management – Changing Our Ways'.
- 'Preventing and Recycling Waste – a Policy Statement'.
- *'Taking Stock and Moving Forward'*. (April 2004)
- *Draft National Biodegradable Waste Strategy'*. (April 2004).

8.3.2 The main thrust of the policy is to promote the waste management hierarchy and to aid local authorities in a transition to a modernised waste system. Government Policy promotes the internationally recognised hierarchy of options:

- Prevention
- Minimisation
- Re-use
- Recycling
- Disposal with energy recovery
- Disposal of residual waste which cannot be prevented or recovered.

8.3.3 The policy sets out the Waste Management National targets. Many of these targets are to be achieved through a regional approach to waste management.

8.3.4 In addition to this, the overriding principles of waste management policy are those of 'polluter pays principle', proximity principle, precautionary principle and the principle of shared responsibility.

Regional Approach to Waste Management

8.3.5 The Local Authorities of Limerick City Council, Limerick County Council, Clare County Council and Kerry County Council produced a 'Waste Management Plan for Limerick / Clare / Kerry Region', adopted in September 2001. This has subsequently been replaced by The Waste Management Plan for the Limerick / Clare / Kerry Region 2006-2011.

8.3.6 The Waste Management Plan for the Limerick / Clare / Kerry Region 2006-2011 covers all non-hazardous wastes generated within each of the above local authorities. It sets out the policy for integrated waste management over the period of the plan. It includes the planning, regulation, collection, recycling, recovery and disposal of such wastes in accordance with current national and EU waste legislation and policy.

8.3.7 Planning for the management of hazardous wastes is the responsibility of the Environmental Protection Agency (EPA) which produced *'The National Hazardous Waste Management Plan'* in 2001 and is being reviewed at present with a plan review to be published for the 2008-2012 period in early 2008.

8.3.8 Waste collected for disposal within the county is taken direct to the North Kerry Landfill or to transfer stations located around the county for compacting and onward transportation to the North Kerry Landfill site at Muingnaminnane.

The E.P.A. currently has licenced 8 waste management facilities throughout the county. 7 of these are operated by Kerry County Council, with 1 privately operated. These facilities are located at:

Kerry County Council operated:

- North Kerry Landfill
- Cahersiveen Waste Transfer Station & Civic Amenity Site
- Coolcaslagh, Killarney Waste Transfer Station & Civic Amenity Site
- Kenmare Waste Transfer Station & Civic Amenity Site
- Milltown Waste Transfer Station & Civic Amenity Site
- An Daingean Civic Amenity site
- Proposed Listowel Civic Amenity site.
- Privately operated:
- Aughacureen, Killarney Transfer Station/Recycling centre

There are also a number of privately operated waste facilities in the county.

Objective No.	Collection & Disposal of Waste
	It is an objective of the Council to:
INF 8-43	Maximising Landfill Resources a) Facilitate the implementation of the waste management hierarchy and the regional waste management plan including the maximizing of the diversion of waste from landfill in accordance with current national and E.U. policy. b) Encourage and support the development of Biodegradable waste treatment facilities and recycling processing facilities.
INF 8-44	Ensuring adequate landfill provision Facilitate the ongoing provision and maintenance of adequate licenced landfill capacity for the disposal of residual waste at a suitable location(s) in the county.
INF 8-45	Upgrading waste disposal facilities Facilitate the upgrading of existing waste disposal facilities and the access to same to accommodate the increasing level of usage of these facilities.
INF 8-46	Domestic Waste Disposal Require new housing schemes, including apartment blocks, multiple holiday home developments and caravan parks / camping sites, to facilitate the collection and removal of residual waste.

Recycling/Recovery

8.3.9 In 2002 5,704 tonnes of material was recycled in Kerry. By 2006 this figure had risen to 11,449 tonnes (including dry recyclables, paper, organic waste, cardboard, glass, aluminium cans, plastic bottles, timber pallets, batteries and white goods). This upward trend is expected to continue.

8.3.10 The collection of recyclable materials is currently achieved through collection of dry-recyclables at households, civic amenity sites and a system of bring banks. Kerry County Council operates amenity areas at each of the waste transfer stations, the An Daingean Civic Amenity site and will do so at the proposed Listowel Civic Amenity Site. There are currently 92 bring locations within the county. In 2001 these stations collected a total of 1,393 tonnes of material. By 2006 this figure had risen to 2,260 tonnes.

Objective No.	Recycling/Recovery
:	It is an objective of the Council to
INF 8-47	Provision of recycling/recovery facilities <ul style="list-style-type: none"> a) Require new housing schemes, including apartment blocks, multiple holiday home developments and caravan parks / camping sites, to facilitate the collection and removal of recyclable materials. b) Encourage existing housing schemes including apartment blocks, multiple holiday home developments and caravan parks / camping sites, to provide recycling facilities for the collection and removal of recyclable materials. c) Facilitate the provision of additional waste recycling/recovery facilities, including one in the Listowel Region and one in the Tralee Region. d) Facilitate the upgrading and improved design of existing and new waste recycling/recovery facilities and the access to same to accommodate the increasing level of usage of these facilities.
INF 8-48	Require significant employers and significant retail developments to provide and maintain suitable locations for public bring bank facilities, as determined by the planning authority.

8.4 WATER SERVICES

8.4.1 The Water Services sector is comprised of Water Supply, Sewerage, Burial Grounds and Public Conveniences.

8.4.2 The significant growth of the economy over the past number of years has increased the pressures on existing water and wastewater infrastructure in the county. It is important that such infrastructure is up-graded in certain areas and improved and extended in other areas, in order to comply with the EU Water Framework Directive, Drinking Water Regulations and EPA licensing requirements, and to facilitate development.

Water as a resource is both valuable and vulnerable. It is vital that water supplies, their catchment areas and other water sources are very well protected and are used and managed in a sustainable manner.

8.4.3 It is important that water services infrastructure continues to be a priority in order to protect public health and the environment and also to remove the barriers to development associated with inadequate infrastructure. This requires the raising of funding locally by the Local Authority by way of contributions from developers towards the provision of water services.

Objective No.	General Water Services
	It is an objective of the Council to:
INF 8-49	Provision of water facilities Provide Water and Sewerage Infrastructure to comply with Statutory obligations, to protect the environment and to facilitate development.
INF 8-50	Priority development Prioritise the provision of infrastructure having regard to the pollution potential, sensitivity of receiving waters and the settlement strategy of this plan.

Water Supply

8.4.4 Kerry County Council supplies approximately 93 million litres of drinking water daily, through 46,000 connections, to 120,000 consumers including the entire water requirements of the towns of Tralee, Killarney and Listowel.

8.4.5 Substantial improvements have been carried out during the period of the County Development Plan 2003-2009. Five water supply schemes have either been completed or are in progress, at a cost of €27.9 million.

8.4.6 Group Water Schemes also play an important role in the provision of a piped water supply to private households in County Kerry. As a result, 98% of the population is served with a piped supply of water from either a Public or Group Water Scheme. More than 100 No. new group schemes have been constructed and 390 individual well grants have been issued since 2003.

8.4.7 It is an overall objective of the Plan to provide for balanced growth throughout the county by promoting the strengthening of rural communities and to provide the infrastructure to facilitate job creation in these areas. Dependable, good quality Water supplies throughout the county are vital elements of this infrastructure. It is also essential that the Water quality infrastructure is adequate to meet the requirements of the Drinking Water Regulations.

Source Protection

8.4.8 It is important that all current drinking water sources, and potential future sources, of water supply are protected. The Lough Guitane catchment is the source of the Central Regional Water Supply Scheme. This is the largest single water supply source in County Kerry, and it services the towns of Tralee, Killarney and Castleisland and their surrounding areas. In view of the impact of a contaminated water supply on the local economy and public health, it is critical that this source be protected. (See also objective EN 11-7).

Water of good quality is a major resource and must be protected. In areas not served by public or group schemes, groundwater is the principle source of water. In rural areas especially, the impacts of housing, agriculture, industry, tourism, extractive industries and waste disposal are potentially harmful to groundwater resources. The location of groundwater resources will therefore be taken into account when assessing Planning Applications.

Water Abstraction

8.4.9 It is important to ensure an adequate, uninterrupted and clean supply of water to all consumers in Kerry. Water is a valuable resource and the production and treatment of its supply must be managed in a sustainable manner in order to ensure it's most efficient and economic use.

Water Conservation

8.4.10 Water is a valuable resource and the production and treatment of its supply must be managed in a sustainable manner in order to ensure it's most efficient and economic use.

Group Water Schemes

8.4.11 Under the European Communities (Drinking Water) (No.2) Regulations 2007, the Environmental Protection Agency (EPA) is now the supervisory authority for the drinking water supplies of each sanitary authority, and each local authority in turn is responsible for enforcement of compliance with the Regulations by the water suppliers (Group Schemes) under its remit. Kerry County Council will work with the Group Scheme sector to ensure that drinking water supplied by the sector meets the appropriate quality and supply standards.

Objective No.	Water Supply
	It is an objective of the Council to:
INF 8-51	Provision of water facilities It is an objective of the Council to provide, upgrade and expand water supply infrastructure throughout the county in accordance with Statutory obligations and the priorities of the settlement strategy identified in this Plan.
INF 8-52	Protection of Water Sources It is an objective of the Council to protect all sources and potential sources of public water supply within the county from pollution resulting from any development and/or land use. (See also objective EN 11-16).
INF 8-53	Water Conservation It is an objective of the Council to <ul style="list-style-type: none"> a) Minimise leakages and wastage within the water supply network. b) Ensure that all new development is designed to minimise leakages and to use water in a most efficient manner. c) Adopt management measures and practices to meet best practice in the efficient usage of water. d) Promote the use of modern water saving sanitary appliances.

Waste Water

8.4.12 Kerry County Council currently operates 42 wastewater schemes which serve approximately 45,000 customers. The wastewater treatment plants of Tralee, Killarney and Listowel Towns are operated by Kerry County Council.

8.4.13 Outside of the main towns and villages, the chief method of effluent treatment is by means of individual septic tanks and proprietary treatment systems.

8.4.14 During the period of the Development Plan 2003-2009 considerable investment has been made in upgrading waste water schemes throughout the county. Five wastewater schemes have either been completed or are in progress, at a cost of €40 million.

8.4.15 The EU Urban Waste Water Treatment Directive as implemented in Ireland under the Environmental Protection Agency Act 1992 and the Urban Waste Water Treatment Regulations 1994, the Waste Water Discharge (Authorisation) Regulations 2007, and the Water Services Act 2007, provide a comprehensive framework for dealing with pollution caused by untreated or inadequately treated discharges to rivers, lakes and coastal waters. The Regulations put an onus on local authorities to provide collecting systems and wastewater treatment facilities of an acceptable standard, for all towns and villages throughout the county which have existing sewerage systems. Kerry County Council will apply for waste water discharge licences and permits for all existing systems and will endeavour to provide new/ upgraded facilities to meet licence and permit conditions. The Council will provide new schemes in selected prioritised villages which are currently unserved, to deal with environmental problems and to facilitate development.

Storm Water Management

8.4.16 No additional Surface Water shall be allowed to discharge to foul sewers or combined sewers. Surface water from new developments will be designed in accordance with the principles of attenuation and controlled discharges, SUDS (Sustainable Urban Drainage Systems) and with any storm water policy documents which may be produced by the Council.

Sludge Management

8.4.17 Kerry County Council shall update the Sludge Management Plan for the county as required to continue to comply with statutory obligations, and as the need arises from the implementation of the proposed Settlement Strategy.

Septic Tanks and Proprietary Waste Water Treatment Systems

8.4.18 Due to the individual nature of the soil and subsoil conditions relating to each site it is necessary that an assessment is carried out to establish the suitability of the site for the satisfactory treatment and disposal of effluent and to ensure that groundwater is protected. This assessment will establish whether effluent can be treated to the required standards and whether the nature of effluent treatment system is appropriate to the site. The standards and requirements relating to wastewater treatment systems are outlined in Chapter 13 'Urban Design, Amenity and Development Management'

Objective No.	Waste Water
	It is an objective of the Council to:
INF 8-54	Provision of Waste Water facilities It is an objective of the Council to: Provide wastewater treatment and collection systems in accordance with the priorities of the settlement hierarchy identified in this plan and to comply with the Waste Water Discharge (Authorisation) Regulations 2007.

INF 8-55	Storm Water Management It is an objective of the Council to <ul style="list-style-type: none"> a) Prohibit additional surface water discharges to foul and combined sewers. b) Ensure that New Developments are designed in accordance with the principles of Sustainable Urban Drainage Systems (SUDS).
INF 8-56	Sludge Management It is an objective of the Council to review and update the County Sludge Management Plan.

Public Conveniences

8.4.19 It is necessary to ensure that public conveniences are provided in appropriate locations for the benefit of both locals and tourists. In recent years, new public conveniences have been developed at Killorglin and Castleisland. The Council shall co-operate with local groups to erect toilet facilities in places where large numbers of people visit or gather and there is an identified need.

Objective No.	Public Conveniences
	It is an objective of the Council to:
INF 8-57	Facilitate the provision of public toilet facilities at selected locations.
INF 8-58	Provide public conveniences in the following areas subject to the availability of finance: <ul style="list-style-type: none"> • An Clochán • An Mhuirríoch • Baile An Fheirtéaraigh • Béal Strand • Bréanann • Castlegregory • Com Dhíneol • Glenbeigh • Kilgarvan • Lauragh • Milltown • Rathmore
INF 8-59	Replace the existing public conveniences in An Daingean, Sneem and Kenmare.

Burial Grounds

8.4.20 Local Authorities have a statutory responsibility to provide burial facilities. Due to the classification of 82 of the county's 123 burial grounds as Archaeological Sites, works to be undertaken in these burial grounds must be carried out in a sensitive manner. Advance approval

must be obtained from the National Parks and Wildlife Service and there is a requirement for archaeological supervision of any works undertaken.

New burial facilities have been developed at Cillmaolchéadair, Cill Chuáin, Ballybunion, Ballyheigue, Finuge and Lios Póil, since 2003, and development works will soon go ahead in Abbey Island Caherdaniel and Baile Ui Bhaoithín.

It is Council policy that all new burial grounds shall be developed in the open lawn style.

Objective No.	Burial Grounds
	It is an objective of the Council to:
INF 8-60	<p>It is an objective of the Council to:</p> <ul style="list-style-type: none"> a) Provide and facilitate the provision of adequate burial grounds in appropriate locations throughout the county b) Ensure that the burial grounds throughout the county are managed and maintained in a manner which respects their associated culture and heritage.

8.5 Power

8.5.1 The provision of electric power as a resource is important to the economic well being and development of the county. It is vital that Kerry has sufficient capacity to meet current and future needs.

8.5.2 In its role as a Planning Authority, the Council assesses proposals in relation to the supply and distribution of power throughout the county. This includes the provision of power from both conventional (coal, oil, gas etc.) and renewable sources and the necessary network infrastructure to serve these.

8.5.3 The Council will liaise with statutory and other energy providers in relation to power generation and their anticipated needs in relation to distribution.

Objective No.	Power
	It is an objective of the Council to:
INF 8-61	Location of Services <ol style="list-style-type: none"> Co-operate and liaise with the E.S.B., Eirgrid and other interested providers to ensure adequate power capacity for the future needs of the county. Minimise the visual impact and obtrusion of the transmission network throughout the county especially in areas of high amenity. Continue with the undergrounding of the network in existing towns and settlements. Achieve, in consultation with the service providers, the undergrounding of new lines where these are proposed in areas of high visual amenity. Have all high voltage lines of 38 kilovolts and greater comply with internationally recognised standards with regard to proximity to dwellings and other inhabited structures. Facilitate the development of power lines to facilities requiring the import or export of power. Support the installation of new power lines, the upgrading of existing lines and stations and the enhancement of security of supply to tail fed stations such as that at An Daingean.
INF 8-62	Support the infrastructural renewal and development of electricity networks in the region, including the overhead lines necessary to provide the required networks.
INF 8-63	Facilitate the provision of power generating facilities throughout the county.

8.6 Telecommunications

8.6.1 The importance of a modern, efficient telecommunications system for the future development of the county cannot be overstated and constitutes a vital element of the county's infrastructure. The Information Technology sector has huge potential for employment creation and access to resilient high quality broadband is essential if the county is to be regarded as a viable location for the development of this industry and other service industries which rely on Broadband. The Council recognises that the current infrastructure in this sector is deficient. Even with the schedules of the incumbent service providers for enhancements of their networks and exchanges in "Next Generation Network" investments, the county suffers an absence of carrier neutral and multi-carrier backhaul in most parts of the county. There is also an increased demand from the domestic and commercial sectors. The Council, therefore, aims to support the provision of telecommunications infrastructure throughout the county, through a number of planning measures:

1. Given that the only economically viable broadband for many areas in the county is wireless broadband, there will be a requirement for more telecommunication masts to facilitate its provision. The Council aims to minimise the number of masts required to service the county

while maximising the usage of each mast. The Planning Authority will encourage service providers to share existing and new mast-space, encourage co-location facilities to be developed and encourage operators to properly engage in frequency planning of licensed and unlicensed spectra to maximise Broadband coverage, quality and resiliency. In particular the Council aims to support the development of Mast infrastructure which facilitates backhaul in the peninsula areas, and Broadband services to areas of the County with no Broadband service and with poor Broadband service.

2. In urban areas, the Council aims to facilitate the development of Open Access subterranean ducting infrastructure, which will provide new opportunities for enhancement of existing fibre based MAN's (Metropolitan Area Network), for joining network segments together and for creating new MAN's. In particular, the Council will seek to exploit the Value for Money opportunities of installing Open Access Telecoms ducting in parallel to other capital intensive initiatives, such as Water and Waste Water network schemes, Road construction, etc.

3. Also in urban areas, the Council aims to support the development of Fibre To The Building infrastructure, again on an Open Access basis, by ensuring that all new significant developments, such as new housing estates and mixed purpose developments have appropriate network infrastructure designed and realised commissioned as a condition of planning.

Objective No.	Telecommunications
	It is an objective of the Council to:
INF 8-64	Facilitate the development of a modern efficient telecommunications network serving the County.
INF 8-65	<p>Provision of Telecommunications</p> <ol style="list-style-type: none"> Support the provision of telecommunications infrastructure (including that for wireless telecommunication) throughout the county, in accordance with the development management standards of Chapter 13. Encourage the use and upgrading of existing telecommunications infrastructure where this provides a feasible alternative to the provision of new additional infrastructure. Support the optimisation of new & existing Mast infrastructure and of telecommunication services by requiring service providers to share existing and new mast-space, encourage co-location facilities to be developed and encourage operators to properly engage in frequency planning of licensed and unlicensed spectra to maximise Broadband coverage, quality and resiliency. Support the development of Mast infrastructure which facilitates backhaul in the peninsula areas of the County, and Broadband services to areas of the County with no Broadband service and with poor Broadband service. Facilitate the development of Open Access subterranean ducting infrastructure in urban areas, which will provide new opportunities for enhancement of existing fibre based MAN's, for joining network segments together and for creating new MAN's. Seek to exploit the Value for Money opportunities of installing Open Access Telecoms ducting in parallel with other capital intensive works, such as Water and Waste Water network schemes, Road construction, etc. Encourage the development of Fibre To The Building infrastructure in urban areas, on an Open Access basis, by the use of appropriate planning conditions on all new significant developments, such as housing estates and mixed use developments. Develop a hierarchy for the future provision of underground services in roads and footpaths in order to optimise the capacity of the roadspace for infrastructural development.