Draft Portarlington Joint Local Area Plan 2025 – 2031

APPENDIX 5

INFRASTRUCTURE ASSESSMENT

1.0 Infrastructure Assessment, County Laois side

1.1 Methodology for Infrastructural Assessment

The Infrastructure Assessment is provided to support the draft Portarlington Joint Local Area Plan 2025 - 2031 (JLAP) in regard to the co-ordination of proposed 'New Residential' land use zonings for undeveloped lands with existing and planned development services.

The National Planning Framework (NPF) requires that the zoning of undeveloped lands is carried out in accordance with a standardised methodology termed a Tiered Approach to Zoning (TAZ). The objective of the TAZ is to avoid zoning lands that cannot be brought forward for development due to deficiencies in necessary infrastructure and services. It provides an evidence-based approach that identifies which:

- Lands are already serviced;
- Lands can connect to services; and,
- Lands are to be provided with services within the lifetime of a development plan.

In accordance with the NPF, infrastructure and services include:

- Road and footpath access, including public lighting;
- Foul sewer drainage;
- Surface water drainage; and,
- Water supply.

The methodology for TAZ is included in Appendix 3 of the NPF, which sets out a two-tier approach to land use zoning as follows:

Tier 1: Serviced Zoned Land

Comprises zoned lands that can accommodate new development as they can connect to existing services and there is service capacity available. The NPF states that these lands will generally be positioned within the existing built-up footprint of a settlement or be contiguous to existing development lands and will be within the footprint of or spatially sequential within the identified settlement.

Tier 2: Serviced Zoned Land

Comprises zoned lands that are not currently sufficiently serviced to support new development but have the potential to become serviced during the lifetime of the development plan. The NPF states that these lands may be positioned within the existing built-up footprint of a settlement or be contiguous to existing development lands or Tier 1 zoned lands, where required to fulfil the spatially sequential approach to the location of new development within the identified settlement.

The NPF requires that where lands are identified as Tier 2 lands, the potential for the delivery of the required services and/or capacity to support new development, must

be identified and specific details provided by the planning authority at the time of publication of the draft and final plan.

1.2 Methodology for Infrastructural Assessment

In the absence of Departmental guidelines which as referred to in the NPF are expected to issue under Section 28 of the Planning and Development Act 2000 (as amended), this Infrastructural Assessment has been developed in accordance with Appendix 3 of the NPF.

The Infrastructure Assessment applies to Portarlington town for which a proposed land use zoning map has been prepared and incorporated into this JLAP. The assessment involves a review of zoned undeveloped land in the town, which includes lands zoned for town centre, mixed use, and residential purposes, and which takes account of the potential for brownfield and infill development.

The focus of the Infrastructure Assessment is on roads, foul sewer drainage, surface water, and water supply infrastructure. The assessment has been informed by internal mapping and consultation with the internal departments of Laois County Council and Offaly County Council, as well as by consultation with Uisce Éireann.

Consultations with the Councils' internal departments and with Uisce Éireann have provided an overview of future infrastructure requirements in Portarlington, in addition to more detailed analysis on a site-by-site basis where this was deemed necessary.

1.3 Traffic Light Rating System

A traffic light rating system has been developed that highlights any deficiencies in the lands, analysed as follows:

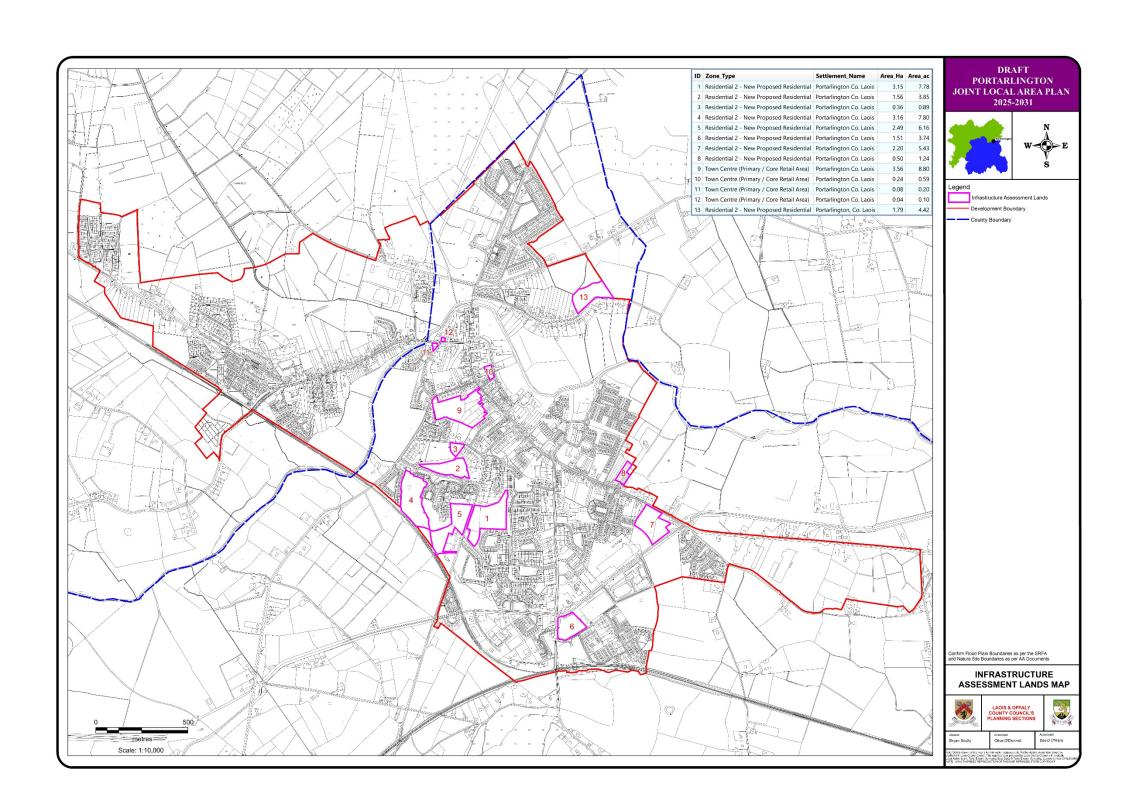
LEGEND	TIER
Infrastructure/services available	
Further investment required	
Provision of infrastructure/services unlikely during period of Plan	

1.4 Infrastructure Assessment Matrixes

The Infrastructure Assessment for Portarlington is set out in Table 1. All lands that have been examined are identified in the table with individual reference numbers. These reference numbers can be used to identify the lands on the Infrastructure Assessment Map.

TABL	TABLE 1: Portarlington				
		INFRASTRUCT URE ASSESSMENT	LAND USE EVA	LUATION	
		Infrastructure/ Services (Roads, foul sewer, water supply, surface water)	•	Physical Suitability (built & natural heritage, flood risk)	
Tier	Map Ref.				Justification
T1	LS 1				Infrastructure/services available & within existing built-up footprint
T1	LS 2				Infrastructure/services available & within existing built-up footprint
T1	LS 3				Infrastructure/services available & contiguous to existing development lands
T1	LS 4				Infrastructure/services available & contiguous to existing development lands

T1	LS 5		Infrastructure/services available & within existing built-up footprint
T1	LS 6		Infrastructure/services available & within existing built-up footprint
T1	LS 7		Infrastructure/services available & within existing built-up footprint
T1	LS 8		Infrastructure/services available & within existing built-up footprint
T1	9		Infrastructure/services available & within existing built-up footprint
T1	10		Infrastructure/services available & within existing built-up footprint
T1	11		Infrastructure/services available & within existing built-up footprint
T1	12		Infrastructure/services available & contiguous to existing development lands
T1	13		services available & contiguous to existing development lands being developed



2.0 Infrastructure Assessment, County Offaly side

2.1 Introduction

Appendix 3 of Project Ireland 2040; National Planning Framework (NPF) sets out a methodology for a two-tiered approach for zoning of land which is informed by an Infrastructural Assessment, which states that "the potential for delivery of the required services and/or capacity to support new development must be identified and specific details provided by the Planning Authority at the time of publication of both the draft and final development or local area plan".

The NPF places an emphasis on the need for compact, smart and sustainable growth and requires 30% of all new housing to be within existing urban footprints (outside of the five cities), thus reducing the amount of greenfield land required to meet future housing requirements.

The NPF defines Tier 1 and 2 lands as follows;

'Tier 1: Serviced Zoned Land, comprising lands that are able to connect to existing development services for which there is service capacity available and can therefore accommodate new development; and

Tier 2: Serviceable Zoned Land, comprising lands that are not currently sufficiently serviced to support new development but have the potential to become fully serviced within the life of the plan.'

The NPF requires that where lands are identified as Tier 2 lands, the potential for delivery of the required services and/or capacity to support new development must be identified and specific details provided by the Planning Authority at the time of publication of the draft and final local area plan.

Table 10.2: titled 'Site Appraisals' evaluates the suitability of sites for zoning based on the principles of compact growth and sustainable mobility along with consideration of the availability of infrastructure and services and the physical suitability of the site. This Planning and Infrastructural Assessment (PIA) ensures that informed decisions are made as to whether or not to zone land or sites in this LAP for residential development and that the County Development Plan Core Strategy is supported.

2.2 Methodology

A review of potential sites within a defined study area is illustrated in Figure 10.1 below. A range of potential sites were identified which were further examined in terms of their suitability for development and zoning. Prior to this review a number of sites for assessment were omitted because they have extant permissions. Smaller infill sites within the town centre (under 1 ha in area) were also omitted from this PIA as their development would be in keeping with Offaly County Development Plan and National Planning Framework policy, and their development would have little bearing on existing services and infrastructure.

Advice was provided by relevant departments of Offaly County Council and external bodies in relation to;

- Any infrastructure deficits that would impede the development of lands;
- The current status of any plans/programmes in place to address these infrastructure deficits;
- The anticipated timeframe for the delivery of these projects.

As the NPF acknowledges that infrastructure and service availability is not the only criteria in determining the suitability of a site for development, it was decided to merge infrastructure and service availability with support for the principles of compact growth, sustainable mobility and the physical suitability of the subject site for development. A traffic light matrix has been developed in Table 10.2 titled 'Site Appraisals' in this regard that weighs adherence to the following criteria;

- Whether the zoning of the site for development promotes compact growth;
- Whether the zoning of the site for development promotes sustainable mobility;
- The availability of infrastructure and services on the site or in the vicinity of the site; and
- The physical suitability of the site for development, i.e. the contours and shape of the site, the accessibility of the site.

A green colour indicates strong adherence to the above criteria, an amber colour indicates medium adherence while a red colour indicates low adherence.

10 potential sites were identified within the study area, which are mapped in Figure 10.1 and described in Table 10.1 'List of Sites Assessed' below.

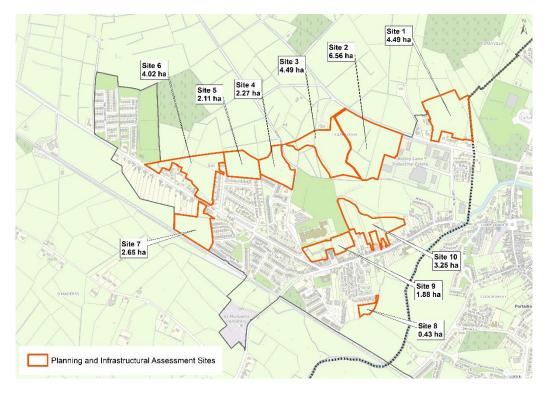


Figure 1 Location of sites assessed as part of this Planning and Infrastructural Assessment

Table 2 List of Sites Assessed

Site	Site Name	Site	Site Description
No.		Area	
1	Kilmalogue	4.49 ha.	Relatively flat site, albeit rises slightly to centre of field, comprises primarily of one field, which can be characterised as cultivated land, is surrounded by a mature hedgerow. The site can be accessed from local

	1	1	
			road L-5015-1 through a gap between individual houses. The Botley Lane Industrial estate is located to sthe outh of site on opposite side of local road. The walkway to Derryounce Lakes and Trails run along eastern boundary of site.
2	Kilmalogue	6.56 ha.	Relatively flat, poor quality land, which lies to the west of the Botley Lane Industrial estate and north of a stream connected to the River Barrow. The subject site can be accessed from Local Road L-5015-1. A number of drains dissect the landholding in a number of locations.
3	Kilmalogue	4.49 ha.	Irregular shaped improved/wet grassland comprising a number of fields interspersed by hedgerow. The subject site can be accessed from Local Road L-5015-1 (Bog Road). There exists a drain and floodplain that runs to the south of the subject landholding.
4	Kilmalogue	2.27 ha	Rectangular shaped cultivated land, which forms part of larger landholding, bordered on three sides by hedgerow. The subject site can be accessed from Local Road L-5015-1 (White Heart Lane). Deep roadside drain runs along local road. There exists a recently constructed housing development to the south of this site.
5	Kilmalogue (F)	2.11 ha.	Rectangular shaped undulating cultivated land, which forms part of larger landholding. Land lies north of an existing Avondale residential area.
6	Kilmalogue	4.02 ha.	Rectangular shaped relatively flat, albeit gradients become undulating to north-east, cultivated land which forms part of larger landholding. Landholding located to the north of dwellings on the R-420 and to the west of the Avondale residential area. Field boundaries of subject land comprises hedgerows. Site can be accessed from the R-420.
7	Kilmalogue	2.65 ha.	Rectangular shaped parcel of cultivated land which lies to the south of individual dwellings on the R-420 and to the west of the Kilmalogue Downs and Lawns housing developments.
8	Church View	0.43 ha.	Relatively small tract of vacant land located to the south of an established residential area, Church View, off Patrick Street in the town.
9	Kilmalogue	1.88 ha.	Vacant backland area located to the north of Patrick Street and east of St Michaels Church in the town.
10	Kilmalogue	3.25 ha.	Vacant backland area to the north of Patrick Street. Lands are relatively flat. Restricted number of access points onto R-420.

2.3 Infrastructural Overview

2.3.1 Roads and Transportation

2.3.1.1 Responsibility for Delivery

Offaly County Council is responsible for the delivery of road infrastructure. Site access arrangements and some road improvement works will generally be developer-led.

2.3.1.2 Necessary Infrastructure

A number of sites require road improvement works as facilities are not in place. Improvement and upgrade works are identified in the Portarlington Local Transport Plan (LTP) generally for roads, cycle lanes and footpaths. In general, most facilities such as footpaths etc. are in place at the majority of the sites in the town centre but no cycle lanes are in place in other sections of the town.

The provision of a new Inner relief road connecting the R423 at Kilmalogue with the R419 at Cooltederry would improve the capacity of Portarlington Town Centre which is currently heavily congested in addition to providing more opportunities for sustainable modes of travel between destinations.

2.3.2 Environment and Water Services

2.3.2.1 Responsibility for Delivery

The provision of public water and sewerage services is the responsibility of Uisce Éireann, the national water services authority. Local authorities act as agents for Uisce Éireann, providing services for the utility under service level agreements.

2.3.2.2 Necessary Infrastructure

There exists sufficient capacity within the Portarlington WWTP to facilitate the lands zoned for development in this Local Area Plan. Uisce Éireann will continue to liaise with both Councils in relation to any operational issues regarding the WWTP. New connections to Uisce Éireann networks are subject to their Connections Charging Policy.

There is limited water supply capacity available, and a Level of Service improvement will be required. There are also some constraints in the water network however, a project is currently being planned to address this issue. As there exists very limited/constrained water supply, the availability of water will be on a first come, first served basis with priority given to domestic customers. Non-domestic developments will be asked by IW to review their proposals to reduce water requirements. In the meantime, IW and Offaly County Council are continually progressing leakage reduction activities, mains rehabilitation activities and lead replacement activities. These are priorities based on leakage rates, water quality issues and ongoing disruption to customer's supplies. IW and Offaly County Council will continue to monitor the performance of the network to ensure that the most urgent works are priorities as required. New connections to Uisce Éireann networks are subject to their Connections Charging Policy.

2.3.3 Drainage/SuDS

2.3.3.1 Responsibility for Delivery

Any drainage works on site will generally be developer-led.

2.3.3.2 Necessary Infrastructure

While there are issues with storm water overflows from the combined sewer system in Portarlington, Uisce Éireann is in the process of developing a Drainage Area Plan that will investigate these issues. The Council will have regard to proposed solutions to address deficiencies in the town's drainage network identified in the Uisce Éireann Drainage Area Plan for Portarlington during the Local Area Plan period. Whilst Irish Water are advancing solution development in the interim, to allow some phased development to go ahead, it will be necessary to remove storm water from the system. It is considered that the promotion of Nature based SUDs (NbSUDs), the promotion of storm water separation and widespread adoption of blue - green infrastructure in this Plan will all take pressure off the combined sewer network in addition to contributing to climate resilience and in addition generate capacity for compact growth.

2.4 Site Assessment

All sites have been appraised based on infrastructural requirements and planning assessment criteria. Table 10.2 provides the site appraisal process and the weighting of infrastructure and planning criteria along with land use zoning recommendations.

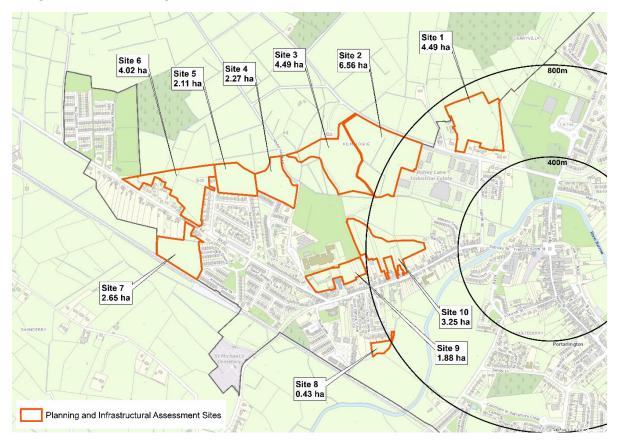


Figure 10.2: Distance of sites from Portarlington Town Centre

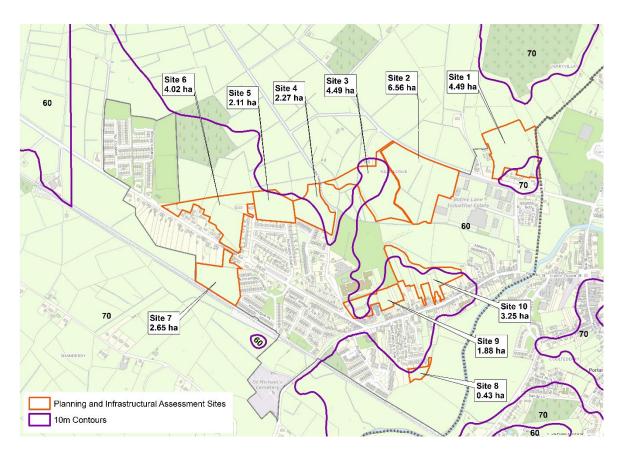


Figure 10.3: Topography of Portarlington

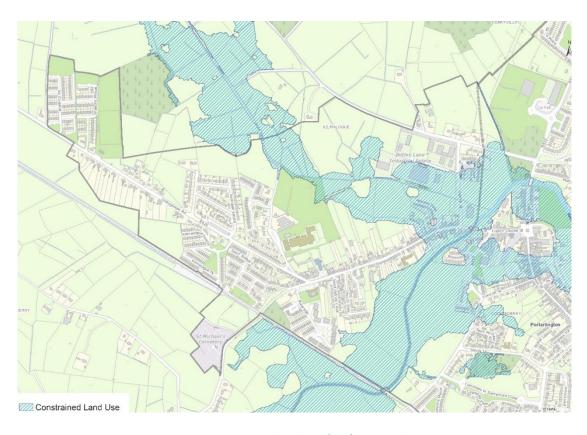


Figure 10.4: Constrained Land Use (CLU) in Portarlington

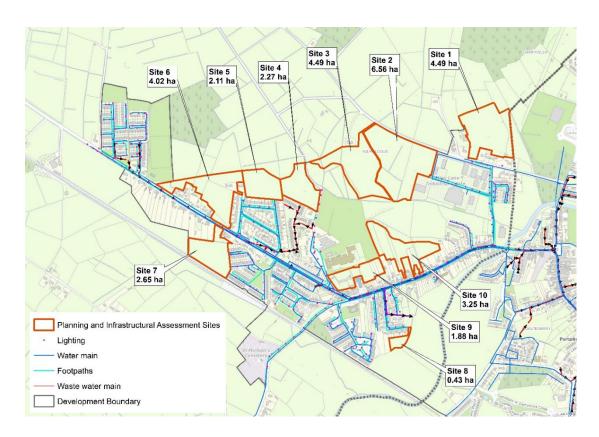


Figure 10.5: Existing infrastructural services in Portarlington

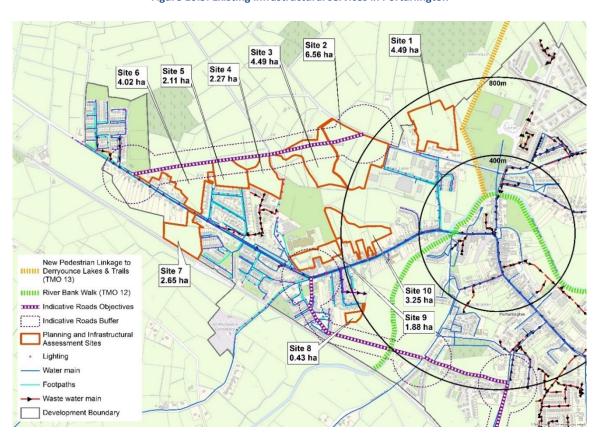


Figure 10.6: Infrastructural Objectives overlain with existing infrastructural services

Table 10.2: Site Appraisals

Site No.	Criteria	Recommendation	Justification
1	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and	Zone partly 'New Residential' and 'Strategic Residential Reserve'	Having regard to this site being located within convenient walking distance of the town centre in addition to its proximity to amenities such as Derryounce walks and trails along with the River Barrow Walk, it is considered suitable for residential development. Lands proposed to be zoned
	accessibility		'Strategic Residential Reserve' have the potential to be developed in time but there are other lands more suitable for residential development that support compact growth in the Plan Area.
2	Promotes compact growth Promotes sustainable mobility	Partly zone 'Industry and Warehousing' and 'Open Space, Amenity and Recreation'.	Whilst the landholding is on the edge of Portarlington, it is considered that the subject zoning would be a logical extension of the existing uses in this part of the town while there is potential to incorporate cycling, walking and
	Availability of infrastructure & services Physical suitability and accessibility		green infrastructure provision into any development on site. Note that lands designated 'Constrained Land Use' within this site are zoned 'Open Space, Amenity and Recreation'.
3	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services	Partly zone 'Industry and Warehousing' and 'Open Space, Amenity and Recreation'.	Whilst there are other lands more suitable for residential development that support compact growth in this Plan, these lands are suitable for industry and warehousing as they could be considered a logical extension of the existing uses in this part of the town. Note that lands designated 'Constrained Land Use' within this

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		site are zoned 'Open Space, Amenity and Recreation'.
4	Promotes compact growth	Zone 'New Residential' and 'Open Space, Amenity and Recreation'.	As this site can be considered sequentially closer to the town centre than other greenfield sites in the vicinity of the plan area, it is
	Promotes sustainable mobility	necreation.	considered suitable for residential development. 'Constrained Land Use' lands are zoned 'Open Space,
	Availability of infrastructure & services		Amenity and Recreation'.
	Physical suitability and accessibility		
5	Promotes compact growth	Zone 'Strategic Residential Reserve'	There are other lands more suitable for residential development that support compact growth in this Plan. These lands however can be
	Promotes sustainable mobility		zoned 'Strategic Residential Reserve' as they have the potential to be developed in time.
	Availability of infrastructure & services		·
Physical suitability and accessibility			
6	Promotes compact growth	Zone 'Strategic Residential Reserve'	There are other lands more suitable for residential development that support compact growth in this
	Promotes sustainable mobility		Plan. These lands however can be zoned 'Strategic Residential Reserve' as they have the potential to be developed in time.
	Availability of infrastructure & services		•
	Physical suitability and accessibility		
7	Promotes compact growth	Zone 'Strategic Residential Reserve'.	There are other lands more suitable for residential development that support compact growth in this

Site No.	Criteria	Recommendation	Justification
	Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility		Plan. These lands however can be zoned 'Strategic Residential Reserve' as they have the potential to be developed in time.
8	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Existing Residential' and 'Open Space, Amenity and Recreation'.	This parcel of land allows for infill development which is appropriate to the character and pattern of development in the area. In addition, zoning infill sites for development rather than sites on the periphery of settlements is a far more sustainable option. Note that lands designated 'Constrained Land Use' within this site are zoned 'Open Space, Amenity and Recreation'.
9	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Neighbourhood Centre'	These lands have to the potential to be developed for uses associated with a neighbourhood centre having regard to their proximity to the town centre, Kilmalogue junction, residential areas and Colaiste losagain secondary school.
10	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services	Zone a combination of 'Community Services/Facilities', 'Existing Residential' and 'Open Space, Amenity and Recreation'.	These lands have to the potential to cater for the potential future expansion of Colaiste Iosagain secondary school or provision of other educational facilities. There exists accessibility issues to the landholding with limited access points from Patrick Street, R-420

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		which renders further development of backlands difficult. There exists limited potential for infill development on vacant parcel of land along Patrick Street, which is appropriate to the character and pattern of development in the area.

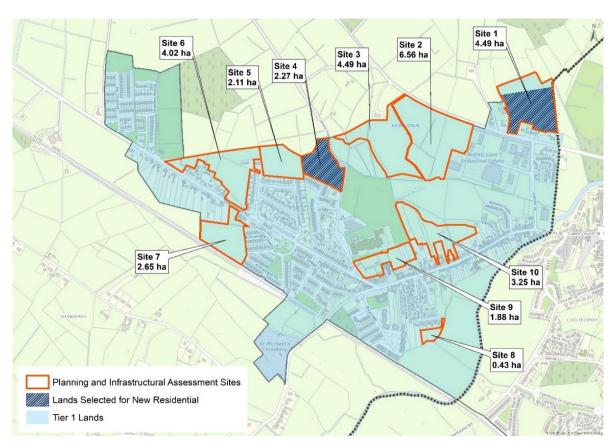


Figure 10.7: Lands categorised Tier 1 and zoned New Residential

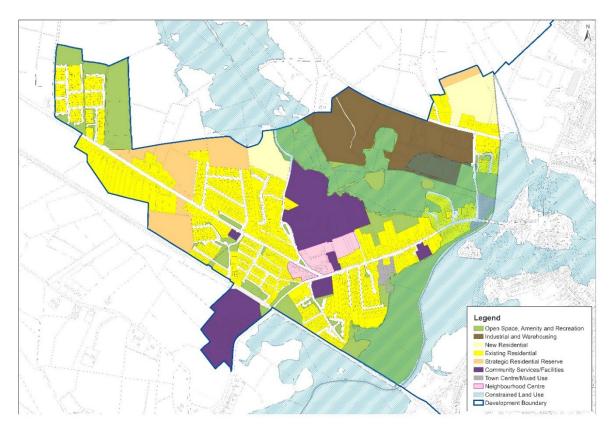


Figure 10.8 Zoning Objectives Map for Plan Area

2.5 Findings and Implications

This Planning and Infrastructural Assessment (PIA) has informed the overall development strategy and the policies and objectives of the Portarlington Local Area Plan (LAP), specifically the zoning proposals for lands zoned new residential. Three sites are recommended for 'New Residential' zonings in the LAP having regard to their serviceability and physical suitability for development, and their adherence to the principles of compact growth and sustainable mobility.

2.6 Infrastructure Delivery Schedule

The Plan seeks to ensure that the required infrastructural and site-servicing requirements for these lands, as outlined in the PIA, are delivered prior to or in tandem with development of these sites, where appropriate and reasonable. The lifetime of the Local Area Plan is six years. The infrastructure delivery schedule is staged in the following phases in order to achieve the timely delivery of infrastructure.

Table 10.3 Infrastructure Delivery Stages

Short term	Year 1 and Year 2
Medium term	Year 3 and 4

Long term	5 years +
On-going	Throughout the plan lifetime and beyond

This schedule should be regarded as a 'living' programme. It will be reviewed at regular intervals to assess how the implementation is progressing, which is influenced by the availability of resources, funding, economic climate and engagement by providers.

Table 10.4 Required Infrastructure

Required Infrastructure	Delivery Schedule	Estimated Cost	Funding Source	
Roads and Transportation				
Southern Relief Road (linking R420 at Shanderry to the local road at Ballymorris)	Long Term	€10m	Department of Transport Specific Improvement Grant	
Inner relief road connecting the R423 at Kilmalogue with the R419 at Cooltederry	Long Term	€3.5m	Department of Transport Specific Improvement Grant	
Inner relief road connecting the R420 at Shanderry to the local road at Kilmalogue.	Long Term	€6m	Department of Transport Strategic Improvement Grant and Development Contribution	
Northern By-pass	Long Term	€10m	National Transport Authority	
Kilmalogue Town Centre First Plan	Short Term	€70,000	Town and Village Renewal	
Improve junction/road realignment at the Kilmalogue Junction	Medium Term	€500,000	Department of Transport Low Cost Safety and/or Active Travel	
Provision of dedicated cycleway from Gracefield GAA to Colaiste Iosagain secondary school	Medium Term	€5m	Active Travel	
Environment and Water Services				
Improvements to surface water drainage at Kilmalogue and Patrick St.	Medium Term	€200,000	Department of Transport Climate Adaptation	
Upgrade of foul sewer, rising main & pumping station	Short term	€750,000	Uisce Éireann	
Drainage/SuDS				

Provision of	Ongoing	€350,000	Development contribution
wetland/swales at			and Uisce Éireann
locations outlined in			
Figure <mark>X</mark>			