Chapter 10: Planning and Infrastructural Assessment

Strategic Aim:

To phase new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure.

10.1 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.

10.2 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 and 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.

Whilst the Edenderry Wastewater Treatment Plant (WWTP) is near capacity, it is considered that having regard to the inclusion of the upgrade of Edenderry WWTP in Irish Waters Capital Investment Plan 2020-2024, the willingness of IW to facilitate the provision of necessary infrastructure through developer-led investment, and the generally good service infrastructure in Edenderry, that the Local Plan Area in its entirety can be considered Tier 1 Lands in accordance with Appendix 3 of the NPF.

24 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.

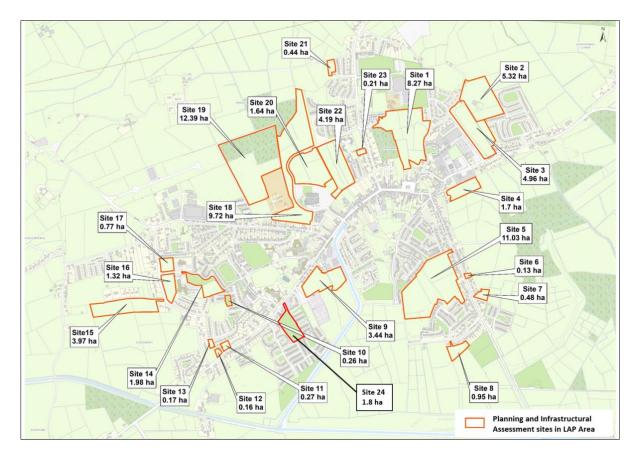


Figure 10.1 Location of sites assessed as part of this Planning and Infrastructural Assessment

Table 10.1 List of Sites Assessed

Site	Site Name	Site Area	Site Description	
No.				
1	Inner Relief Road Site	9.4 ha.	Large Greenfield site bounded by the Inner Relief Road to the north, Clonmullen Lane to the east, existing built up area at St. Conleth's Road to the west and the town centre to the south. The site is relatively flat.	
2	Clonmullen site	5.32 ha.	Gently sloping site from south to north, accessed via Clonmullen Drive/Clonmullen Lane. The site is largely greenfield with some agricultural structures at the centre.	
3	Hares Lane Site	4.96 ha.	Vacant Greenfield site bounded by the Inner Relief Road to the west, Boyne Meadows housing estate to the east and the R402/Dublin Road to the south.	
4	Site to rear of Civic Amenity site	1.7 ha.	Flat greenfield site to the south of R402/Dublin Road. Site is accessed via the R402 and is to the rear of a number of light industrial uses along this route. Western end of site is within 250m of town square.	
5	Site to west of Father Murphy Street	11.03 ha.	Site consists of 4 individual parcels to the south east of Edenderry Town Centre to the rear of Father Paul Murphy Street. The site is relatively flat with some hedgerow separating each land parcel.	
6	Father Paul Murphy Street Site 1	0.13 ha.	Vacant greenfield site directly accessed via Father Paul Murphy Street. Relatively flat with no visible constraints.	
7	Father Paul Murphy Street Site 2	0.48 ha.	Vacant greenfield site directly accessed via Father Paul Murphy Street. Relatively flat with no visible constraints.	
8	Tyrell's Lane Site	0.95 ha.	Vacant greenfield site accessed via Tyrell's Lane approx. 1km to the south of town centre.	
9	Site south of Edenderry Business Park and St. Mary's Road	3.44 ha.		
10	The Park Site, Killane View	0.26 ha.	Vacant residential zoned land used for public open space. Accessed directly from The Park, surrounded by existing housing and located approximately 800m south west of the town centre.	
11	St. Mary's Road, Killane	0.27 ha.	Vacant land accessed via St. Mary's road to the south west of town. Bounded by existing residential to the north east, south west and north.	
12	St. Mary's Road, Killane	0.16 ha.	Vacant land accessed via St. Mary's road to the south west of town. Bounded by existing residential to the north east and north. Vacant Site of Killane Church to the south east.	
13	Killane View Site	0.17 ha.	Vacant site at Killane View, Edenderry, used as informal open space currently. The site is bounded by existing	

			residential to east and west and site of former Killane Church to south.	
14	Killane Drive Site	1.98 ha.	Existing informal open space and vacant land on a slightly elevated site at Killane Drive. Site is bounded by education uses to the west and existing residential to the north, south and east.	
15	Monasteroris Site	3.97 ha.	Site is located at western extremity of town, accessed from R441. Existing detached residential to north and east, agricultural land to the south and west.	
16	Monasteroris west of Scoil Bhríde Primary School	1.32 ha.	Flat, rectangular shaped site located to the west of existing primary school (Scoil Bhríde) and to the north west of Killane Drive housing development. Site is accessed via access road off R441.	
17	Monasteroris west of Gaelscoil Éadan Doire	0.77 ha.	Flat, square shaped site located to the west of existing primary school (Gaelscoil Éadan Doire) and to the south of Rectory Meadows and Rectory Court housing developments. Site is accessed via access road off R441.	
18	North of St. Francis Street and south west of Edenderry Shopping Centre	9.72 ha.	Irregular, elongated site to the west of Edenderry Shopping Centre. Northern portion of land subject to flood risk. Route of inner relief road traverses/bisects the site. Some areas of raised embankments in northern section of site.	
19	Monasteroris, north west of Edenderry Shopping Centre	12.39 ha.	Primarily flat greenfield site with some embankments centrally, marshy soil with some evidence of inundation at north east corner. Currently accessed via unsurfaced private lane to the west. Route of future section of Inner Relief Road traverses the land in an east-west direction. Site lies to the north west of Edenderry Shopping Centre, which is separated by the Edenderry WWTP land.	
20	Incomplete Hotel Site	5.51 ha.	Site of partially completed hotel development, is relatively flat with some areas of the site identified as a flood risk. Site is accessed via Downshire row to the south and a future cycleway/walkway runs north/south along the eastern boundary of site. Access is also possible via the Inner Relief Road to the north. Flat greenfield site to north of Edenderry Shopping Centre with identified areas of flood risk for majority of site. Accessed via Downshire Row.	
21	Site at Carrick Esker/Edenderry GAA	0.44 ha.	Greenfield site to the west of existing residential development at Carrick Esker. Flat site with no visible constraints. Proposed Cycle/Walkway to north and south of site.	
22	Agricultural Site at Carrickhall	4.19 ha.	Greenfield site located to the north east of Edenderry Shopping Centre. Site is identified for flood risk and is relatively level. Existing informal pedestrian path traverses the southern boundary of the site.	
23	Carrickhall/St. Conleth's Road Site	0.21 ha.	Flat greenfield site at corner of junction of Carrickhall and St. Conleth's Road. Site is identified for flood risk.	

Ī	24	St Marys Road	1.8 ha.	Land currently used as playing field. There exists a	
				housing development to the south west, The Sycamores,	
			and to the north east, Cedar Lawns, of the subject site.		
				Access to the field is from a narrow lane onto the R402,	
				which has very restricted sightlines to the north east, due	
				to the location of walls of a Quakers burial ground.	

10.3 Infrastructural Overview

10.3.1 Roads and Transportation

10.3.1.1 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.

10.3.1.2 Necessary Infrastructure

A number of sites require road improvement works as facilities are not in place. Improvement and upgrade works are identified in the Edenderry 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 distributor road to the north of the town connecting the Edenderry Business Park with the recently constructed Distributor Road in Clonmullen would improve the capacity of Edenderry Town Centre which is currently heavily congested in addition to opening up backlands for development.

In addition, the widening of the R441 at Monasteroris would alleviate a pinch point and allow for a better circulation of traffic in the west of the town.

10.3.2 Environment and Water Services

10.3.2.1 Responsibility for Delivery

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

10.3.2.2 Necessary Infrastructure

Whilst there exists limited headroom in the Edenderry WWTP currently; 368 population equivalent (PE), this will be increased on completion of the Irish Water upgrade of the plant as included in the Irish Water Investment Plan 2020 to 2024 and is not seen as a long-term constraint. Where new network provision or network reinforcements such as upgrades or extensions are required, these shall be developer driven unless there are committed Irish Water projects in place to progress such works. New connections to Irish Water networks are subject to their Connections Charging Policy.

The Edenderry Public Water Scheme produces approximately 2,113 m³/day of water. Raw water is abstracted from the Kishawanny and Edenderry boreholes. Having regard to the constrained/limited water supply capacity, 368 PE, where new network provision or network reinforcements such as upgrades or extensions are required, these shall be developer-driven unless there are committed Irish Water projects in place to progress such works. New connections to Irish Water networks are subject to their Connections Charging Policy.

10.3.3 Drainage/SuDS

10.3.3.1 Responsibility for Delivery

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

10.3.3.2 Necessary Infrastructure

The public sewer network in the town is considered satisfactory subject to limited local upgrades in certain parts of the town. A number of potential wetland/swales will be required at a number of locations in the town (see Figure 6.13 Potential Green Infrastructure Projects in Chapter 6 Biodiversity and Green Infrastructure) to provide additional storage to reduce flood risk and improve water quality.

10.4 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.

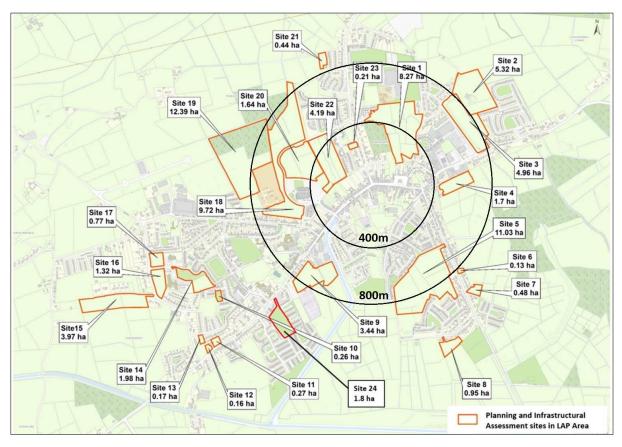


Figure 10.2: Distance of sites from Edenderry Town Centre

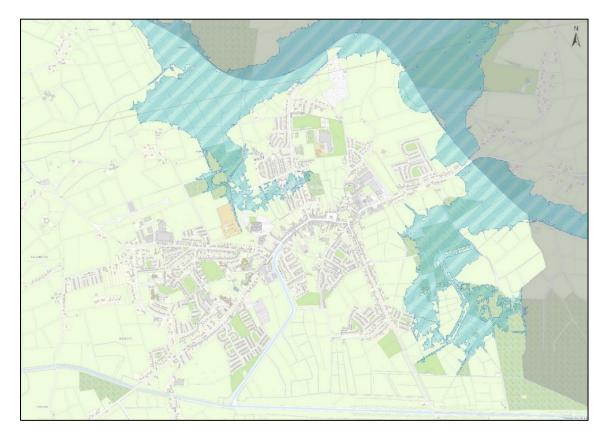


Figure 10.3: Edenderry Flooding Areas



Figure 10.4: Topography of Edenderry

Table 10.2: Site Appraisals

Site No.	Criteria	Recommendation	Justification
1	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone site 'New Residential'.	Having regard to this site being located within convenient walking distance of the town centre in addition to the new distributor road, footpaths and cycleways running along the north of the site, it is considered suitable for residential development.
2	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Do not Zone.	As this site is located on the periphery of the town, development of this site would not promote compact growth. In addition there exists constrained capacity to accommodate typical traffic generated by business and commercial uses in the vicinity of the site. It is therefore considered that there are more suitable sites elsewhere in the plan area to zone for development.
3	Promotes compact growth & sustainable mobilityPromotes sustainable mobilityAvailability of infrastructure & servicesPhysical suitability and accessibility	Zone 'Enterprise and Employment'	Having regard to the proximity of the site to the existing major retail areas to the west and good road and walking accessibility from the inner relief road and the R402/Dublin Road, an Enterprise and Employment zoning is considered reasonable.
4	Promotes compact growth	Zone Enterprise and Employment	Having regard to the proximity of the site to the existing major retail areas to the north east and good

Site No.	Criteria	Recommendation	Justification
	Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility		road and walking accessibility from the R402/Dublin Road, an Enterprise and Employment zoning is considered reasonable.
5	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone a combination of 'New Residential' and 'Strategic Residential Reserve.'	Having regard to part of this site being located within convenient walking distance of the town centre in addition to the established residential character of the area, it is considered reasonable to zone the field in the north eastern site of the landholding for residential development. The remainder of the landholding can be considered in subsequent Local Area Plans.
6	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Existing Residential'	This parcel of land allows for small scale infill development which is appropriate to the character and pattern of development in the area.
7	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services	Zone 'Existing Residential'	This parcel of land allows for small scale infill development which is appropriate to the character and pattern of development in the area.

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		
8	Promotes compact growth & sustainable mobility	Do not Zone.	As this site is located on the periphery of the town, development of this site would not promote compact growth or
	Promotes sustainable mobility		promote sustainable mobility. There are other lands more suitable for residential development identified in the Plan Area.
	Availability of infrastructure & Services		
	Physical suitability and accessibility		
9	Promotes compact growth & sustainable mobility	Zone combination of 'Enterprise and Employment' and 'Open Space, Amenity and Recreation'.	Independent road access to this landholding is restricted. It is considered that an 'Enterprise and Employment' zoning would allow for an extension of the Edenderry Business Park. The zoning of the southern part of the landholding as 'Open Space, Amenity and Recreation' would allow for community access directly
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability and accessibility		from the potential location of a pedestrian bridge across the Grand Canal.
10	Promotes compact growth	'Open Space, Amenity and Recreation'.	This site is a functional public open space area serving the residential development that it is located within.
	Promotes sustainable mobility		within.
	Availability of infrastructure & Services		
	Physical suitability and accessibility		

Site No.	Criteria	Recommendation	Justification
11	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Existing Residential'.	This parcel of land allows for small scale 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.
12	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Existing Residential'.	This parcel of land allows for small scale 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.
13	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & services Physical suitability and accessibility	Zone 'Existing Residential'.	This parcel of land allows for small scale infill development which is appropriate to the character and pattern of development in the area.
14	Promotes compact growth Promotes sustainable mobility	Zone combination of 'New residential' and 'Open Space, Amenity and Recreation'.	It is considered that a 'New Residential' zoning for the southern part of the land would be appropriate to the character and pattern of development in the area in addition to promoting

Site No.	Criteria	Recommendation	Justification
	Availability of infrastructure & services Physical suitability and accessibility		sustainable mobility having regard to its close proximity to two schools and local amenities. A 'Open Space, Amenity and Recreation' zoning is considered appropriate for the large public space area to the north serving Killane Drive.
15	Promotes compact growthPromotes sustainable mobilityAvailability of infrastructure & ServicesPhysical suitability and accessibility	Do not zone.	As this site is located on the periphery of the town, residential development of this site would not promote compact growth. It is considered that there are more suitable sites elsewhere in the plan area that would be more appropriate to zone for residential development.
16	Promotes compact growth Promotes sustainable mobility Availability of Infrastructure & Services Physical suitability and accessibility	Zone 'Community Services/Facilities'.	It is important to allow for expansion of existing schools and safeguard land for new schools to potentially locate into the future. The subject parcel of land is located in close proximity to a number of established residential communities to the west of the town. It is considered that there are more suitable sites elsewhere in the plan area that would promote compact growth in relation to 'New Residential' zonings.
17	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services	Zone 'Community Services/Facilities'.	It is important to allow for expansion of existing schools and safeguard land for new schools to potentially locate into the future. The subject parcel of land is located in close proximity to a number of established residential

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		communities to the west of the town. It is considered that there are more suitable sites elsewhere in the plan area that would promote compact growth in relation to 'New Residential' zonings.
18	Promotes compact growth Promotes sustainable mobility Availability of Infrastructure & Services Physical suitability and accessibility	Zone 'Enterprise and Employment'.	Having regard to the proximity of the site to Edenderry Wastewater Treatment Plan, it is considered not suitable for residential development. Having regard to the proximity of the site to the Edenderry Business Park and the potential extension of the Park into this part of the town, in addition to the proposed Distributor Road running through the site, an Enterprise and Employment zoning is considered reasonable. Whilst it is noted that part of this site is located on land 'Constrained Land Use, it is considered that this site is suitable for enterprise and employment as these uses are not considered vulnerable flood uses for the most part. As per Objective LUZO-13 in Chapter 11 of this Plan, the Planning Authority will have to satisfy itself that any proposed use is in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended.
19	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services	Zone 'Enterprise and Employment'.	Having regard to the majority of this site being located outside convenient walking distance of the town centre, it is considered not suitable for residential development. Having regard to the proximity of the site to the Edenderry Business Park and the potential extension of the Park into this part of the town, in addition to

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		the proposed Distributor Road running through the site, an Enterprise and Employment zoning is considered reasonable. Whilst it is noted that part of this site is located on land designated 'Constrained Land Use, it is considered that this site is suitable for enterprise and employment as these uses are not considered vulnerable flood uses for the most part. As per Objective LUZO-13 in Chapter 11 of this Plan, the Planning Authority will have to satisfy itself that any proposed use is in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended.
20	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services Physical suitability and accessibility	Zone 'Community Services/Facilities'	This site is located within convenient walking distance of the town centre in addition to having good accessibility through its location adjacent to the existing Distributor Road. Whilst it is noted that part of this site is located on land designated as 'Constrained Land Use, it is considered that this site is suitable for community services/facilities as these uses not considered vulnerable flood uses. As per Objective LUZO-13 in Chapter 11 of this Plan, the Planning Authority will have to satisfy itself that any proposed use is in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended.
21	Promotes compact growth	Zone 'Strategic Residential Reserve'	Whilst this site is located adjacent to an existing housing development, it is located on the

Site No.	Criteria	Recommendation	Justification
	Promotes sustainable mobility Availability of infrastructure & Services Physical suitability and accessibility		periphery of the town and thus does not promote compact growth. It is considered that there are more suitable sites elsewhere in the plan area that would be more appropriate to zone for residential development. This site can be considered in subsequent Local Area Plans.
22	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services Physical suitability and accessibility	Zone 'Enterprise and Employment'.	Having regard to the proximity of the site to the Edenderry Business Park and the potential extension of the Park into this part of the town, in addition to the proposed Distributor Road running through the site, an Enterprise and Employment zoning is considered reasonable. Whilst it is noted that part of this site is located on land 'Constrained Land Use, it is considered that this site is suitable for enterprise and employment as these uses are not considered vulnerable flood uses for the most part. As per Objective LUZO-13 in Chapter 11 of this Plan, the Planning Authority will have to satisfy itself that any proposed use is in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended.
23	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services	Zone 'Existing Residential'	This parcel of land allows for small scale 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.

Site No.	Criteria	Recommendation	Justification
	Physical suitability and accessibility		
24	Promotes compact growth Promotes sustainable mobility Availability of infrastructure & Services Physical suitability and accessibility	Zone 'Open Space, Amenity and Recreation'.	Independent access to the field is very restricted coming from a narrow lane onto the R402, which has very poor sightlines to the north east, due to the location of walls of a Quakers burial ground. It is considered that the site currently used as playing field is important for Oaklands community college. It is also considered important to preserve open space areas in vicinity to high density housing developments in the town.

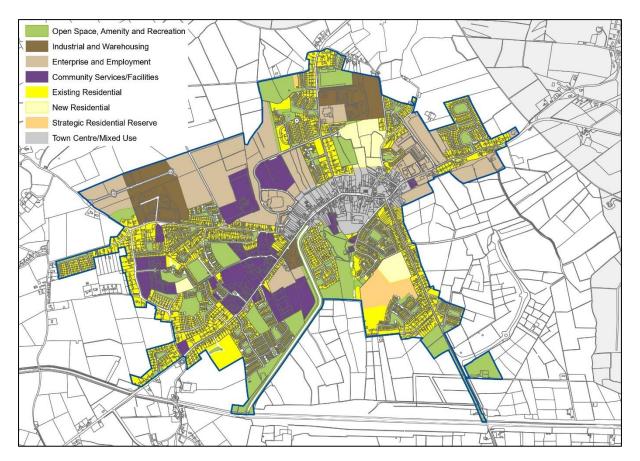


Figure 10.5 Zoning Objectives Map for Plan Area

10.5 Findings and Implications

This Planning and Infrastructural Assessment (PIA) has informed the overall development strategy and the policies and objectives of the Edenderry 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.

10.6 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					
Edenderry Inner Relief Road	Short Term	€5 million	Department of Transport Specific Improvement Grant		
Monasteroris (R441) Road widening	Medium Term	€1 million	Department of Transport Specific Improvement Grant		
Rathmore Outer Relief (R441 to R402 link)	Long Term	€12 million	Department of Transport Strategic Improvement Grant and Development Contribution		

Grand Canal Spur Footway/Cycleway Bridge	On-going	€2m	National Transport Authority			
Environment and Water Services						
Wastewater Treatment Plant Upgrade	Medium Term	€7.5 million	Responsibility of Irish Water			
Drainage/SuDS						
Provision of wetland/swales at locations outlined in Figure 6.13 Potential Green Infrastructure Projects	On going	€180,000	Development contribution and Irish Water.			