



5 DEVELOPMENT FRAMEWORK

5.0 DEVELOPMENT FRAMEWORK

5.1 Introduction

The lands that form part of this Local Area Plan represent a wide range of different land uses as established under the 2001 Meath County Development Plan, as well as a large tract of undeveloped lands in the form of the Bryanstown and Mill Road/Marsh Road landbanks.

For the purposes of the Local Area Plan, the overall landbanks have been further subdivided into a number of 'character areas'. These are as follows:

1. Rathmullen Area
2. Donore Road Area
3. Duleek/Platin Road Corridor
4. Bryanstown Cross Route
5. Colpe Cross Area
6. Bryanstown Area
7. Mill Road/ Marsh Road Area

This LAP therefore firstly sets out general principles and an overall development framework in this chapter (Chapter 5) and subsequently makes more specific recommendations for each of the character areas identified (Chapter 6).

5.2 Key Development Principles

As outlined in Section 2, the overall development context for Drogheda is substantial given the anticipated population expansion to approximately 65,000 persons by 2024, as set out in the Planning Strategy for the Greater Drogheda Area. The main areas of development expansion are outside the Drogheda Borough Council Boundary, located to the north in the administrative area of Louth County Council and to the south, in the Meath County Council administrative area.

In this context it is important that all future expansion of the town is integrated into the existing context of the built up area. It is therefore an imperative objective of this Local Area Plan that all new housing development and residential extension areas form an integral part of the built up area of Drogheda. These areas should be integrated with the town by providing clear and legible linkages, particularly for pedestrians and cyclists and by ensuring that new built up areas integrate with the existing and established built fabric of the town.

The overall development principles for the Local Area Plan lands should strictly adhere to the objectives and policies set out in the Planning Strategy for the Greater Drogheda Area; in particular as follows

- *New expansion areas to north and south to provide for primarily residential: use, local employment and district scale recreation and amenity facilities.*
- *promote the street as the basic element of the urban area;*
- *Ensure that road infrastructure is related to,*

- *appropriate to and subservient to the roll out of development land;*
- *Ensure key services are in place before development of an area begins; avoid temporary solutions introduced by developers;*
- *Promote urban expansion in a managed, sequential manner.*

A number of key objectives apply in terms of the overall development framework of future development in the Plan area:

- DF1** *All new development should be set in/ be mindful of the context of the existing built up area of Drogheda town and needs to demonstrate how it integrates with the town proper, both in terms of linkages and integration with the existing built form.*
- DF2** *The sequential approach shall apply to all new residential development in that those areas closest to the existing built up area should be developed first.*
- DF3** *All necessary physical infrastructure is required to be provided in line with all new development.*

5.3 Key Principles of Urban Design

A set of key principles has been established which guide the urban design aspects of the Local Area Plan. These are based on best national and international practice standards.

The key principles of Urban Design that are manifest in the development of the Local Area Plan are as follows:

- **Character**
To develop the South Drogheda Environs into a place with its own identity and character by responding to and reinforcing locally distinctive patterns of development and landscape.
- **Continuity and Enclosure**
To develop the South Drogheda Environs into a place where public and private spaces are clearly distinguished and where the continuity of street frontages and the enclosure of space by the built form is achieved.
- **Quality of the Public Realm**
To promote public spaces and routes throughout the South Drogheda Environs area that are attractive, safe, uncluttered and work effectively for all in society, including older people and people with mobility impairments.
- **Ease of Movement**
To develop the South Drogheda Environs into a place that is easy to get to and move through. To promote

accessibility and local permeability by connecting the South Drogheda Environs with Drogheda town centre, Drogheda rail station and adjoining areas by putting people before traffic and integrating land uses and transport.

- **Legibility**

To promote legibility in the South Drogheda Environs area through development that provides recognisable routes, intersections and landmarks to help people find their way around.

- **Adaptability**

To develop the South Drogheda Environs Area into a place that can change easily and to promote adaptability through development that can respond to changing social, technological and economic conditions.

- **Diversity**

To promote diversity and choice through a mix of compatible developments and uses that work together to ensure that the South Drogheda Environs area will be a place that responds to local needs.

In accordance with policies of the Meath County Development Plan 2007-2013, any new residential development over 0.2 hectares (0.5 acres) or for more than 15 residential units will require the submission of a design brief.

UD1 All future residential development of more than 15 units or area over 0.2 hectares will require a design brief demonstrating how the proposed development complies with best principles of urban design as outlined in this Local Area Plan and the design criteria of the County Development plan.

5.4 Residential Development Standards

Within the overall LAP area there remain large tracts of land zoned for residential development which have not been developed to date. Going forward, all new planning applications need to comply with the development management guidelines and standards as set out in the Meath County Development Plan, 2007 as well as complying with the wider policy context and best design practice, primarily those set out in the Department of the Environment, Heritage and Local Government's publications "Delivering Homes, Sustaining Communities" and "Quality Housing for Sustainable Communities" as well as the recommendations contained in the Draft Consultation Guidelines on "Sustainable Residential Development in Urban Areas".

The best practice guidelines "Quality Housing for Sustainable Communities" set out a number of essential requirements in relation to quality housing. The documents sets out that good quality, sustainable housing should be:

Socially and environmentally appropriate

The type of accommodation, support services and amenities provided should be appropriate to the needs of the people to be accommodated. The mix of dwelling type, size and tenure should support sound social, environmental and economic sustainability policy

objectives for the area and promote the development of appropriately integrated play and recreation spaces.

Architecturally appropriate

The scheme should provide a pleasant living environment, which is aesthetically pleasing and human in scale. The scheme design solution should understand and respond appropriately to its context so that the development will enhance the neighbourhood and respect its cultural heritage.

Accessible and adaptable

There should be ease of access and circulation for all residents, including people with impaired mobility, enabling them to move as freely as possible within and through the development, to gain access to buildings and to use the services and amenities provided.

Dwellings should be capable of adaptation to meet changing needs of residents during the course of their lifetime.

Safe, secure and healthy

The scheme should be a safe and healthy place in which to live. It should be possible for pedestrians and cyclists to move within and through the area with reasonable ease and in safety. Provision for vehicular circulation, including access for service vehicles, should not compromise these objectives.

Affordable

The scheme should be capable of being built, managed and maintained at reasonable cost, having regard to the nature of the development.

Durable

The best available construction techniques should be used and key elements of construction should have a service life in the order of sixty years without the need for abnormal repair or replacement works.

Resource efficient

Efficient use should be made of land, infrastructure and energy. The location should be convenient to transport, services and amenities. Design and orientation of dwellings should take account of site topography so as to control negative wind effects and optimise the benefits of sunlight, daylight and solar gain; optimum use should be made of renewable sources of energy, the use of scarce natural resources in the construction, maintenance and management of the dwellings should be minimised.

It is a policy of the Local Area Plan that the key recommendations set out in "Quality Housing for Sustainable Communities" are implemented in any new large-scale residential development and that these need to be addressed as part of the design brief in line with policy UD1 of this plan.

In addition, new apartment developments need to adhere to DoEHLG Planning Guidelines "Sustainable Urban Housing: Design Standards for New Apartments" and the requirements set out therein. In line with the recommendations set out in the guidelines, this Local Area Plan requires that the minimum requirements for apartment sizes set out in the guidelines

should be exceeded. It is considered that this is a reasonable and necessary requirement to ensure that new apartment development in the LAP lands will provide for a sustainable and attractive living environment for future residents. In this regard, the LAP sets out the following requirements:

RDS1 Given the suburban nature of the Local Area Plan lands, it is considered appropriate that the minimum apartment sizes set out in the 'Sustainable Urban Housing Guidelines' should be exceeded in at least 50% of all apartments of any given scheme by at least 20% over and above the minimum requirements to ensure that apartment living can compete in attractiveness with more traditional type housing.

RDS2 In addition to policy RDS1, it is a policy of this Plan that in any apartment development of 30 or more units, 40% of all apartments should be of a size of 80sqm or more.

RDS3 Notwithstanding policy RDS2, the overall dwelling mix of apartment schemes should achieve a good balance of different sized apartments to provide for a wide variety of dwelling type, size and tenure.

5.5 Open Space

Public Open Space

It is the objective of the Council to retain, enhance, facilitate and promote usable Public Open Space in existing and new developments. All requirements of the Meath County Development Plan (2007) need to be adhered to. In addition, the following objectives need to be met:

OS1 To require a landscape Master Plan for open space to be provided as part of housing developments. This should be drawn up by a qualified landscape architect. Planting shall be of species native to the area

OS 2 To facilitate and encourage the development of children's playgrounds in areas of Public Open Space.

OS 3 High-quality landscaping in public and private developments, including the provision of mature trees, shall be an integral part of any application for residential development.

OS4 In large housing developments, it is an objective to encourage the inclusion of one central open space in the form of a fully landscaped park.

OS5 All Planning applications shall be accompanied by a tree survey of all existing trees on the application site. The survey shall be prepared by a person competent in this field.

OS6 It is an objective of the Council to encourage the development of allotments in the Drogheda Environs area.

Private Open Space

Private Open Space standards as set out in the County Development Plan need to be adhered to. In particular policies

contained in Section 10.1.4.2 of the Plan in relation to houses and the provisions of Section 10.1.4.3 in relation to apartment developments.

5.6 Public Art

Public art should be provided alongside future infrastructure and development schemes through the "Percent for Arts" scheme administered by the Department of the Environment, Heritage and Local Government. The County Arts Officer should be consulted on opportunities for permanent art to enhance focal points within the town.

It is an objective of the Council to identify and exploit opportunities for public art to reflect Drogheda's heritage, and identify locations which have regard to the town's network of pedestrian and amenity spaces. Accordingly, the following objectives will apply to the LAP lands:

PA 1 To require major new developments in the LAP area to incorporate works of public art. In this regard, the County Arts Officer should be consulted on any planning applications for residential schemes in excess of 75 dwelling units. Commercial developments shall be assessed on a case by case basis.

5.7 Neighbourhood & Community Facilities

Successful communities require a wide range of local services and facilities. These include employment, commercial, childcare, educational, health, spiritual, civic amenities and services. All services should be readily accessible from residential areas by safe, convenient and direct walking routes. A detailed assessment for the future provision of services shall also be carried out as part of the Urban Design Framework Plans to be provided for Bryanstown and the Mill Rd/ Marsh Rd areas.

Emergency Fire services for the area need to be provided by Drogheda Fire and Rescue Services Station on Rathmullen Rd, Drogheda.

All new residential development needs to ensure that the nearest facilities can be accessed by direct routes. In this regard, the layout of new residential estates needs to facilitate pedestrian and cycle movements to nearby services.

It is further an objective of this Plan that any new residential developments over 1 hectare (2.47 acres) or for more than 50 residential units will require the submission of an audit of community facilities. This should demonstrate where a shortfall in facilities might exist and how this should be addressed, either through provision on site or through financial contributions to the Local Authority. The following objectives will apply:

CF1 Any new residential developments over 1 hectare (2.47 acres) or for more than 50 residential units will require the submission of an audit of community facilities.

CF2 If a shortfall in community facilities is identified in the community infrastructure audit, these shortfalls shall be addressed in accordance with the requirements of Meath County Council.

5.8 Social and Affordable Housing

The specific requirements set out in Section 5 of the 2007 Meath County Development Plan and the Meath Housing Strategy apply in terms of the provision of social and affordable housing in the LAP area.

In particular, the Development Plan notes that the Council will require a 20% quota of social / affordable housing to be provided from each housing development within the County, on lands zoned for residential use or mixture of residential and other uses.

This requirement will be included as a condition of development, with the exception of an application for development of 4 or less houses, or for housing on land of 0.1 hectares or less as provided for under the Planning & Development (Amendment) Act 2002.

Therefore all residential developments in excess of 4 housing units or any proposed site for residential development in excess of 0.1 hectares is to be subject to the provision of "Social/Affordable" Housing.

The calculations that were carried out by the Planning Department of Meath County Council have indicated that the maximum 20% requirement must be applied across the County. In terms of the ratio for the distribution between social and affordable housing, the Plan notes that regard must be had to those areas where there are larger concentrations of existing Social Housing or a greater potential for the development of such housing on lands in the ownership of the Local Authority & Voluntary sector. In this regard, a ratio of 3% social and 17% affordable shall apply to the Drogheda Environs (in line with the Development Plan requirements).

5.9 Economic Development

It is a key objective of both national and regional planning guidance as well as the Planning Strategy for the Greater Drogheda Area that an adequate supply of local employment be ensured to avoid undue dependence on the Greater Dublin Area for employment and thereby reduce the demand for long distance commuting.

The Meath County Development Plan, 2007-2013 equally notes that sustainable development in County Meath will require more jobs in the county, i.e. local job creation for the existing and projected resident population.

A number of employment zoned landbanks currently exists in the Local Area Plan. These are to the west of Drogheda town and are clustered adjacent the existing employment area of the Donore Road and Matthew's Lane/ Marley's Lane ('Drogheda Industrial Estate'). A substantial tract of land is associated with the IDA Business Park located off the Donore Road.

It is considered that the Local Area Plan lands are in a strategically advantageous position to attract further investment and indigenous industry, particularly in relation to accessibility to both the national road and rail network and Dublin Airport.

The Drogheda Planning Strategy identifies a number of factors which can help optimise Drogheda's economic attractiveness. Room for improvement is outlined in relation to the following

issues:

- Physical Accessibility of employment lands within Drogheda (vis a vis the rail station and town centre)
- Adequacy and flexibility in employment space, to accommodate expansion and changes on foot of technological or procedural changes.
- Encouragement of Start-ups and SMEs.
- Availability of infrastructure (e.g. electricity, gas, water, telecoms, waste management) and services (notably top class hotel accommodation) at competitive cost.
- Creation of a good quality environment which will benefit attracting employment.

In order to make the Drogheda Environs more attractive for business and to further attract jobs into the area, some additional lands have been zoned for 'E2 – Light industry and industrial office type development' in the Bryanstown area, thereby enlarging the existing zoned landbank to achieve critical mass in this location which enjoys direct access from the Duleek Motorway Interchange.

In addition, the recent completion of the M1 motorway has created a number of highly strategic locations at the newly created motorway interchanges, notably the Duleek Road Interchange and the Donore Road Interchange. It is an objective of this Plan to capitalise on the strategic benefits of these interchange locations whilst ensuring that any future development here does not compromise the carrying capacity of the Motorway or the integrity of the surrounding rural landscape.

The following objectives apply:

- | | |
|-----|---|
| ED1 | <i>It is an objective of Meath County Council to encourage and facilitate the promotion of an adequate supply of local employment provision in the plan area for the existing and projected resident population.</i> |
| ED2 | <i>It is an objective of the Local Area Plan to provide for a Park and Ride facility and integrated shuttle bus service in line with the recommendations of the Planning Strategy for the Greater Drogheda Area.</i> |
| ED3 | <i>The Duleek Road Motorway Interchange and the Donore Road Motorway Interchange have been identified as key strategic Motorway Interchanges adjoining the existing urban area of Drogheda town. It is a objective to capitalise on the strategic benefits of these interchange locations whilst ensuring that any future development here does not compromise the carrying capacity of the Motorway or the integrity of the surrounding rural landscape. In particular, the Motorway Interchange Study (now underway) will focus on the employment generating capacity of the 2 no. interchanges ie the Duleek Road Motorway Interchange and the Donore Road Motorway Interchange. Subject to a positive outcome from this assessment, the Planning Authority shall within 2 months of the completion of the Motorway Interchange Strategy commence procedures, by way of Variation to the South Drogheda Environs Local Area Plan, to zone these lands accordingly. These procedures shall be fully implemented and completed within 6 months of the publication of the Motorway Interchange Strategy</i> |
| ED4 | <i>To have regard to objective ED OBJ 1 of the Meath County Development Plan, 2007-2013. In particular,</i> |

to carry out an examination of land uses at existing and proposed Motorway Interchanges throughout the County with a view to guiding and managing their future development in partnership with relevant stakeholders including the relevant adjacent Planning Authorities and National Roads Authority. The examination shall be required to be cognisant of the need to safeguard the carrying capacity and current investment in the national roads network.

5.10 Heritage and Landscape Protection

It is an objective of the Local Area Plan to retain and enhance the existing archaeological, architectural, heritage and landscape features that are found within the Local Area Plan lands.

The key objectives in respect of heritage and landscape protection are as follows:

- HL 1 *To retain landscape features and hedgerows wherever possible.*
- HL 2 *To incorporate existing watercourses into new landscaping and parks.*
- HL 3 *To prevent the removal of hedges and trees during nesting season.*
- HL 4 *To identify and protect flood plains around the River Boyne SAC and to take full cognisance in any future development of the protection afforded to the Boyne Estuary by way of its designated status as a NHA, SPA and SAC.*
- HL 5 *To protect the habitats of protected species, such as:*
 - *bats in bridges, buildings and trees;*
 - *badgers and bats in woodland and hedgerow habitats; and,*
 - *kingfishers, otters and salmon in freshwater in wetland habitats.*
- HL 6 *To ensure that ground and surface waters are protected from pollution.*
- HL 7 *To respect the historic setting of Brú na Bóinne, Newgrange and the Battle of Boyne site.*
- HL 8 *To ensure the protection of buildings included in the Record of Protected Structures as set out in the County Development Plan.*
- HL 9 *To ensure that any development in close proximity to the Brú na Bóinne World Heritage Site fully complies with the Brú na Bóinne Management Plan.*
- HL 10 *To ensure the protection and safeguarding of the archaeological heritage of the LAP area and adjacent lands.*

5.11 Traffic and Transportation

Introduction

An efficient and comprehensive transportation infrastructure is essential to the successful future development of the lands under consideration. Existing developments have increased car travel demand and pressure on the existing road network.

This plan will draw a balance between the need of motorists and pedestrians where appropriate and promoting the use of public transport. This plan constitutes a sustainable approach to the future development of the transportation system within the southern environs of Drogheda.

The plan draws on recommendations from the Drogheda Town Transportation Study commissioned by Drogheda Borough Council and issued in December 2006 in relation to junction improvements and provision for cyclists, pedestrians and public transport.

Mobility studies and proposals to maximise use of public transport will be required for all significant development proposals.

Roads

It is the intention of Meath County Council to ensure that all roads are designed as 'people friendly' with regard to pedestrian and cycling facilities. To this end, the Council will promote the use of innovative design; this may take the form of soft engineering such as horizontal alignment of roads and/or use of green verge to road sides to segregate pedestrians and cyclists and to promote traffic calming. Hard engineering solutions such as speed ramps and speed tables will be discouraged.

Traffic Generation

It is anticipated that a population equivalent of 12,400 within the Bryanstown and Mill Road A2 and A5 zoned lands would generate an Annual Average Daily Traffic (AADT) of 32,000 across the road network based on TRICS data for 4275 residential units. Other uses, such as employment, will also potentially contribute to overall traffic volumes. Design and construction of all roads shall consider best practice at all times and shall be in accordance with the National Roads Authority Publications, Road Geometry handbook, design manual for Roads & Bridges & Manual of Contact Documents for Road Works, and the Traffic Management Guidelines, published jointly by the Department of Environment and Local Government, the Department of Transport and the Dublin Transportation Office.

Proposed New Roads

The M1 to R132 Link Road and the distributor road linking Colpe Cross to the Marsh Road will form important components of the development of the Southern Environs. These roads will be developer driven and it will be a requirement that facilities for pedestrian and cyclists will be segregated from traffic.

Local Collector Roads

Local collector roads will be created at locations along the Bryanstown distributor road via northern arms at five strategically located roundabouts. They will provide for local journeys and provide links to major routes. Residential and commercial access and or frontage will be permitted to these roads and they will be designed to provide safe movement of pedestrians and cyclists.

Characteristics for Roads Network			
Classification	N1- R132 Link Road	Local Collector Road	Minor Access Road
Design speed (kph)	80	50	30
Geometric Characteristics			
Min Standard Carriageway Width (m)	7.3	6.0	5.5
Standard Radius at bends			
Preferred (m)	255	40	20
Minimum (m)	127	--	--
Minimum Length of Curve per 1% Change in Gradient (m)			
Sag	13	9	6.5
Crest	17	10	6.5
Visibility Splays			
X (m)	4.5	3.0	3.0
Y (m)	120	70	50

Table 5.1: Characteristics of Road Network

Access Roads

The design speed for the access roads is to be a maximum of 30kph. Vehicle access to properties and access for delivery of goods and services is to be provided. Segregated cycle tracks are not a requirement on access roads, however pedestrians are to have freedom to cross the access roads.

Visibility Splays

Clear visibility splays shall be provided at all junctions within the development and at junctions with existing and proposed roads as per the geometric Design Table or as otherwise agreed with the Council. All property boundaries and parking bays shall be clear of the visibility splays.

Traffic Calming

Traffic calming measures are to be introduced in accordance with the 'Traffic Management Guidelines' and shall be designed as an integral part of any development philosophy. The horizontal alignment of roads will be the preferred method to limit the speed of vehicles, however, where this is not possible alternatives will be considered such as:

- Carriageway narrowing and chicanes
- Gateways & entry treatment
- Speed control islands
- Change of priority at junction

Parking

Car parking spaces shall be provided in accordance with the Meath County Development Plan. Parking spaces must be considered in the geometric design of the roads. On-street parking can also contribute to traffic calming.

Pedestrian/ Cyclist Facilities

Within Drogheda, there are currently little or no cycle facilities within the town centre or on the major links into town. Pedestrians are compromised by relatively high traffic volumes and inadequate footpath provision, particularly at most junctions within the town centre. The Drogheda Transportation Study

proposed a number of recommendations to provide for the safe and convenient pedestrian and cycle access to the town centre. These proposals have been adopted by Drogheda Borough Council as objectives in the draft variation to the Drogheda Borough Development Plan.

The development of the Bryanstown and Mill Road/Marsh Road areas via Masterplanning gives the opportunity to promote cycling as a real alternative transport mode.

The use of segregated footpaths and cycle path along all internal distributor roads and major distributor roads will be required. The segregation or integration of cycle traffic should

be determined with regard to the design guidance in the 'Provision of cycling facilities- National Manual for Urban Area'. The potential to provide cyclist facilities along the Bryanstown Cross Route, R132 and Platin Road, Marleys Lane, Beymore Road, Rathmullen Road Mill Road and Marsh Road should be investigated as proposed in Drawing 5.1 (overleaf).

It is proposed that pedestrian facilities along the Mill Road are provided to provide a link to the new neighbourhood centre at Colpe Cross. Similarly, pedestrian facilities should be improved along sections of the March Road to provide a complete link to Drogheda Town Centre.

It is proposed that McEvoy's lane connecting Rosevale estate to town underneath the railway lane is upgraded to provide for cyclist and pedestrian use.

Public Transport

Meath County Council recognises the need for a modern integrated public transport system. To this end the Council require designated bus routes through the neighbourhoods, bus stop lay-bys are to be provided along the M1 to R132 Link Road and encouraged along the Local Collector Roads where this is not possible, kerbside bus stops will be permitted.

In addition to the provincial services linking Drogheda to Dundalk and Dublin, there is a limited town bus service. This internal service will have to be expanded to serve the new residential communities that will emerge within the southern environs. Designers and developers will be required to provide for bus routes and shelters within developments and the integration of bus and railway services will be encouraged.

Further to the potential routes identified by the Drogheda Transportation Study, additional Bus Routes to service the zoned lands are identified in Figure 5.2 (overleaf). Whilst indicative only they represent routes to the key development areas within the southern environs.

Four additional routes are indicated; all serving the town centre, and are described as follows.

Route 1 This would be a loop route serving the R132 and passing through the centre of the Bryanstown Framework plan area, serving areas zoned for community, retail, and recreational facilities. The route would return to town via the Beymore Road and Mary Street/ R132 Junction.

Route 2 This would be a loop route serving Donore Road and returning to town via Rathmullen Road. The route would serve residential zoned lands at the urban boundary on the Rathmullen Road and existing developments along Marleys Lane.

Route 3 This route would serve the south west environs along the Donore Road and would serve as shuttle bus to the IDA lands and the proposed Park & Ride Facility, south of the existing Drogheda Retail Park adjacent to the M1.

Route 4 This route will serve the residential zoned lands to the east of Drogheda, in particular the Marsh Road and the new distributor road to Cople Cross, returning to the town centre via the R132. An existing bus service, the 190/191 between Drogheda Bus Station and Laytown currently serves the Marsh Road, and is used to transport pupils to Drogheda Grammer School. This provision of this new route will depend on the phasing of development in the area.

These routes have been planned to optimise catchments that would ensure that the future developments would fall within the desired 400m walking distance to a bus stop, and provide a mode choice that would reduce dependence on car travel to the town centre.

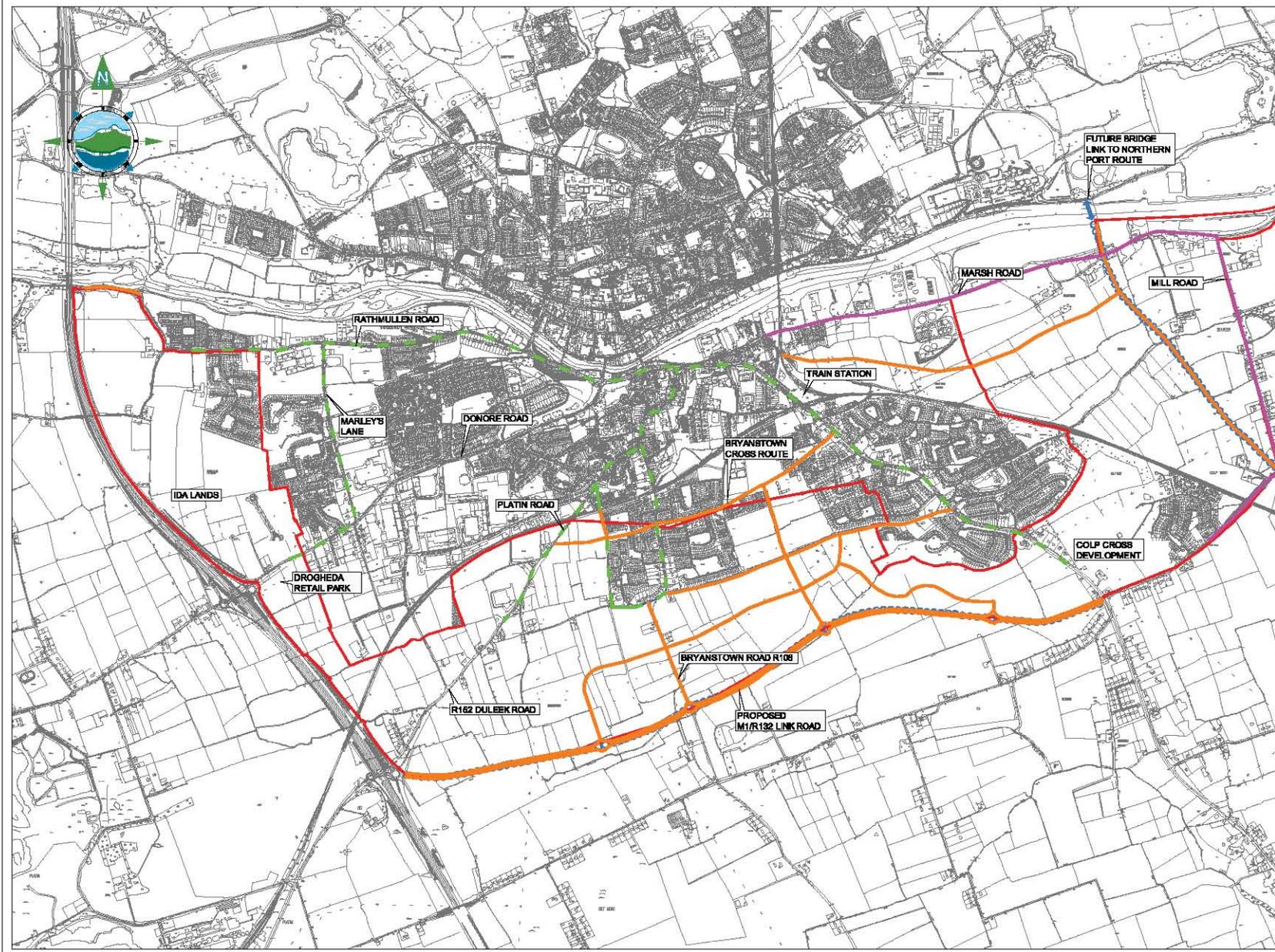
The provision of a local feeder bus is subject of an application for the new Drogheda United Stadium (Ref SA70455). However, this bus service would be limited to operating during match times only and has therefore not been taken into account in the future provision of bus services for the plan area.

Roads and Transportation Objectives:

- RT1 *To achieve a balance between the use of private transport with the need to promote alternative modes of transport such as public transport, cycling and walking*
- RT2 *Meath County Council will encourage and assist in the enhancement of a public transport system in Drogheda in agreement with Louth County Council*

and the relevant transport authorities in order to improve general accessibility to and from the town, and therefore reduce the impact of the private car on the urban environment.

- RT3 *It is an objective of the Plan to increase the sense of safety of public spaces to encourage walking and cycling*
- RT4 *Car Parking shall be an integral part of design elements for the urban frameworks. Large expanses of surface car parking shall be discouraged, particularly in civic/commercial centres.*
- RT5 *It is a requirement that the Construction of the link between the M1 Motorway and R132 be carried out in a single entity in its entirety. The provision of this road shall be provided as part of future development proposals for the area (i.e. developer driven).*
- RT6 *While the Council recognise certain minimum roads engineering standards are necessary, all application will be assessed against priority treatment for cyclists and pedestrians*
- RT7 *To implement the transport management recommendations outlined in the Drogheda Transportation Study commissioned by Drogheda Borough Council as they relate to the Plan area.*
- RT8 *Development of Park & Ride Facility and associated shuttle bus service on the Donore Road to reduce pressure on long stay town centre parking as outlined in the Greater Drogheda Area Planning Strategy.*
- RT9 *To cater for the increased town based traffic movements. Meath Co Co in conjunction with adjoining Local Authorities shall investigate the feasibility of a future strategic road crossing of the Boyne east of the Railway Viaduct, which would link with the Northern Port Access Road. This study shall include details on the proposed funding mechanisms for such infrastructure.*
- RT10 *To require noise mitigation measures to be implemented in any future planning applications within zones of influence of national roads or planned new national roads.*



LEGEND:

- LAP BOUNDARY
- - - ON STREET CYCLE PATH
- SEGREGATED CYCLE PATH & FOOT PATH
- PROVISION OF IMPROVED PEDESTRIAN FACILITIES
- NEW INDICATIVE MAJOR DISTRIBUTION ROAD
- - - NEW INDICATIVE MINOR DISTRIBUTION ROAD

D	APR 08	MEATH PLAN REVISED	SA	GT
E	APRIL 08	LAP SECONDARY REVIEW	SA	GT
A	APRIL 08	ISSUE FOR APPROVAL	SA	GT
Issue	Date	Description	By	Class

Client:
MEATH COUNTY COUNCIL

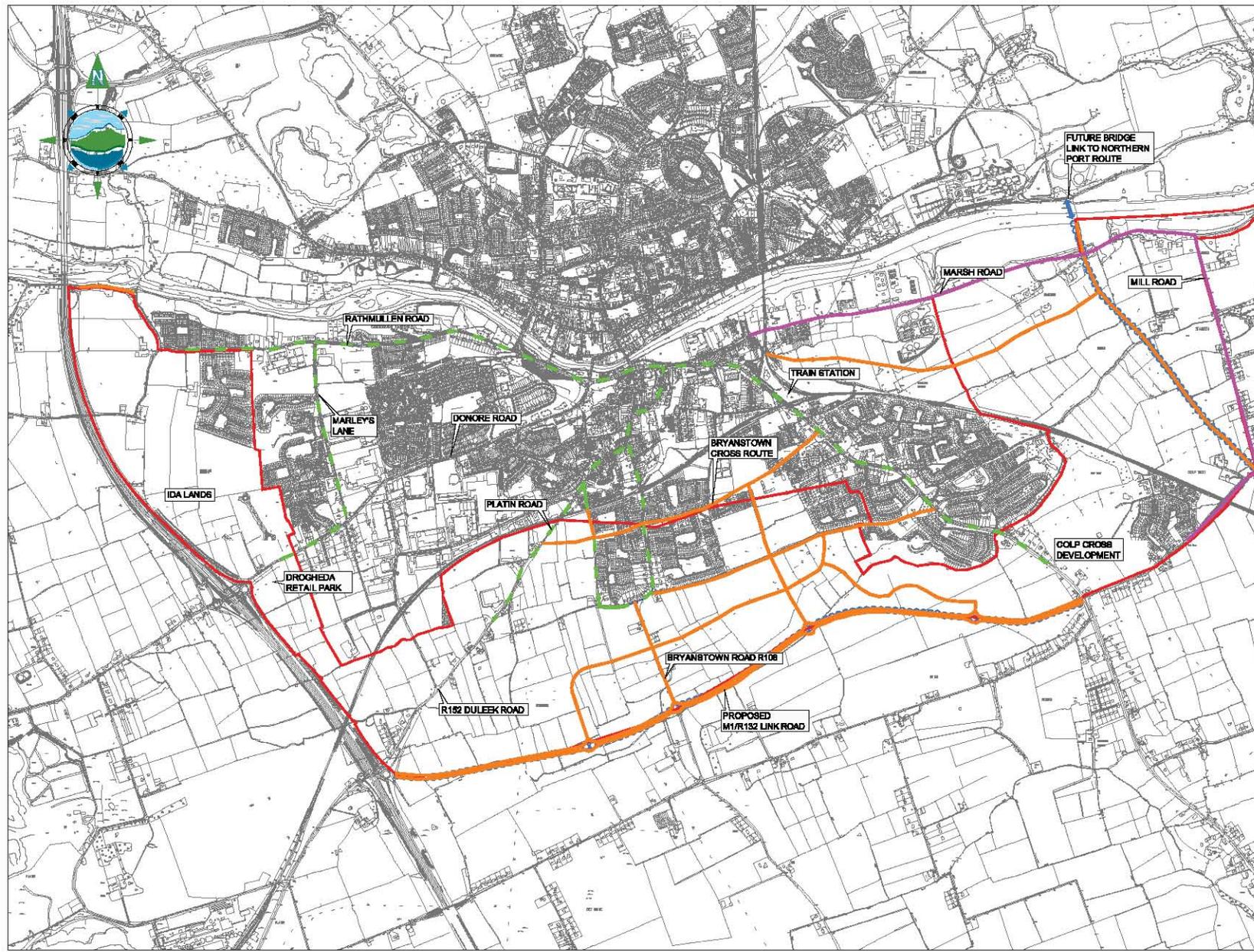
Project:
LOCAL AREA PLAN
DROGHEDA ENVIRONS

Title:
EXISTING AND PROPOSED
CYCLE PATH & FOOTPATH

Scale @ A1:	1:10,000	
Prepared By:	Checked:	Date:
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Drawing No: **Figure 5.1** Sheet **C**



LEGEND:

- LAP BOUNDARY
- - - ON STREET CYCLE PATH
- SEGREGATED CYCLE PATH & FOOT PATH
- PROVISION OF IMPROVED PEDESTRIAN FACILITIES
- o o o o NEW INDICATIVE MAJOR DISTRIBUTION ROAD
- - - NEW INDICATIVE MINOR DISTRIBUTION ROAD

C	JUNE 2008	MASTERPLAN REVISED	DK	DT
B	APRIL 2008	LAP BOUNDARY REVISED	DK	DT
A	APRIL 2008	DRUGS FOR APPROVAL	DK	DT
Rev	Date	Description	By	Chk.

Client:
MEATH COUNTY COUNCIL

Project:
LOCAL AREA PLAN DROGHEDA ENVIRONS

Title:
EXISTING AND PROPOSED CYCLE PATH & FOOTPATH

Scale @ A1: **1:10,000**
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Drawing No: **Figure 5.1** **C**

5.12 Infrastructure

5.12.1 Water Supply

The Preliminary Engineering Report for the East Meath, South Louth & Drogheda Water Supply Scheme, submitted to Meath County Council in September 2004 contained detailed proposals for the development of water sources to cater for the needs of the supply area to the year 2023. A review of this report was undertaken during 2007 with an updated report submitted in October 2007. This updated 2007 Report was commissioned to take account of the following:

- Findings of a groundwater trial well drilling and testing programme undertaken in the period February 2006 to August 2007.
- New targets for population growth defined by Meath County Council Planning Department, in agreement with the Department of the Environment Heritage and Local Government and Louth County Council.
- Projected water demand growth in the area served to the year 2030
- Conjunctive use of available surface water and ground water sources to meet the needs of the scheme.

This Preliminary Engineering Report contains comprehensive proposals to update and develop water sources, mains infrastructure and storage capacity within the scheme area to cater for anticipated development to the year 2030.

Included in the report recommendations are the following proposals that are of particular relevance to the LAP lands:

- Upgrade the abstraction works on the River Boyne at Roughgrange to a total abstraction of 48.0MI/d;
- Provide a new rising main from Roughgrange to Staleen (Water Treatment Works) WTW
- Treatment Works at Staleen to be upgraded to a total deployable output of 45.3MI/day;
- Provision of a new 600mm/450mm trunk main between Staleen WTW and Donore Reservoirs
- Development of a 5MI/d Groundwater Wellfield at Donore (Mellon O'Reilly lands at Rathmullen and adjacent OPW lands)
- Provision of a water treatment plant with a design output capacity of 4.5MI/d, and an additional storage reservoir of at least 10MI capacity at the existing Donore Reservoir Site;
- Development of a 15.5MI/d Groundwater Wellfield at Kiltrough
- Provision of a water treatment plant with a design output of 14.6MI/d, and additional storage reservoir of at least 10.5MI adjacent to the existing Kiltrough Water Tower.
- Provision of a new 500mm/400mm distribution main to serve lands in South Drogheda administered by Meath County Council.

The early development, on a phased basis, of the proposed wellfields at Donore and Kiltrough with provision of the associated treatment, storage capacity and trunk/distribution mains is critical for the supply of water to the LAP lands.

Future Water Main Network within the LAP Lands

Proposals for the water main network will be required to

demonstrate best practice with regard to design, construction, environment, ecological, economical and technical areas. In particular, new water mains in the South Drogheda Area will be required to be:

- Constructed to appropriate standards so as to minimise potential leakage from new mains;
- Configured and metered such that District Meter Areas can be established.

Trunk Main:

A trunk main is to be constructed along the route of the proposed N1 to R132 Link Road. This main will be fed from the proposed 500mm/400mm main from Kiltrough to South Drogheda. The main is to be designed to cater for the entire catchment as well as providing a strategic circumferential main for the overall Drogheda Network. Direct connection from the trunk main will be kept to a maximum of three or four connections.

Water Supply

The Mill Road area will be served by the proposed 450mm dia trunk watermain which crosses the River Boyne and connects into the proposed 400mm dia truck watermain supply to south Drogheda from Kiltrough Water Tower or directly from Staleen WTW. This infrastructure would provide a complete ring main around the east of Drogheda, enabling supply from either. Staleen WTW, Kiltrough Water Tower or the proposed Killineer Reservoir.

Secondary Main:

It is proposed that a secondary main will be provided with connection off the trunk main. This main will effectively provide loops within each neighbourhood. They may be used as the primary distribution mains for the temporary water supply arrangements until such time as the trunk main is delivered in conjunction with the M1 to R132 Link Road. These mains are to be located within the footpath of the distributor roads. These mains will also be required to provide interconnectivity with the existing Drogheda Borough Council network.

Feeder lines:

A number of feeder lines off the Secondary Main will provide access point for the proposed sub-catchments. These lines may also connect into adjacent developments within the Drogheda Borough Council area.

Individual Development Mains:

Water mains to serve individual housing developments will be required to be designed as looped networks. The mains are to be located in open space or, where possible, along the footpath.

Water main Design Considerations

It will be necessary to demonstrate best practice with regard to all design. The laying of distribution water mains should be in accordance with the guidelines published by the Water Services Department, Meath County Council in July 2007.

Water Conservation

Future developments must have regard to the need to conserve water and as a means of addressing this issue may include the following measures:

- Pressure and flow regulations on fittings;
- Appropriately sized meters;
- Prohibition on direct feeds to heating and appliances;
- Low flush toilets;

- Rainwater harvesting and reuse for toilet flushing;
- Apartments to include end use recycling.

Objectives:

- WM1 To protect and develop, in a sustainable manner, existing groundwater sources and aquifers in the county and to restrict and control development in a manner consistent with the proper management of this resource. In addition to this, Meath County Council will carry out subject to available resources a groundwater protection scheme in the south Drogheda and East Meath area.”*
- WM2 To promote public awareness and involvement in water conservation measures by households, businesses, and industries.*
- WM3 To implement the Water Conservation Programme, in order to conserve valuable resources by reducing wastage.*
- WM4 To co-operate with Louth County Council and Drogheda Borough Council in implementing the key findings and recommendations of the ‘East Meath, South Louth & Drogheda Water Improvement Scheme (as updated October 2007) for a water supply scheme to meet the anticipated water requirements to serve projected growth level of this area to the year 2030.*

5.12.2 Foul Water Drainage

Wastewater Treatment

The Phase 2 upgrade works to the Drogheda Wastewater Treatment Plant are currently underway. This work when completed will provide a treatment capacity at the plant of 101,000pe. However, the upgraded works will only partially address capacity constraints and further substantial works are required to deliver a long-term solution to wastewater treatment in the region.

Two options exist for the long term provision of additional wastewater treatment in the region as follows:

- (i) In line with policies INF POL 51&52, Meath County Council to co-operate with Drogheda Borough Council in bringing forward plans for the expansion of the existing WwTP at Marsh Road beyond the current Phase 2 design capacity of 101,000pe thereby, achieving an increased reserved allocation for Meath. Such proposals to consider design modularity so that future planned expansions can be phased to coincide with future development. In planning for a future expansion of the WwTP cognisance should be taken of the land required for this expansion and the requirement to provide an appropriate buffer distance to nearby developments to mitigate potential future noise and odour issues from an expanded plant.
- (ii) In line with policy INF POL 53 of the County Development Plan, Meath County Council to pursue investigations into the provision of a sub regional wastewater treatment facility and outfall to the Irish Sea in the vicinity of Gormanston to serve the East-Meath settlements of Mornington East, Bettystown, Laytown, Julianstown, Donacorney,

Mornington, Stamullen, Gormanston and Mosney. This solution would cater for wastewater treatment of the urban centres along the east coast, exclusive of Drogheda. This would allow the capacity of the Drogheda Wastewater Treatment Plant being utilised in the medium to long term to cater for the needs of Drogheda and Environs, in accordance with the Greater Drogheda Planning Strategy. The continued achievement of Blue Flag status for bathing waters in the vicinity may depend on the quality of the effluent discharge standards set for any such wastewater treatment plant and the siting and length of the sea outfall.

The shortfall in wastewater treatment capacity in the region is such that Meath County Council needs to take immediate action in investigating both options outlined above in order that an adequate level of treatment can be provided to the planned developments

Reduction in Loading

Meath County Council will look favourably on measures taken to reduce the Hydraulic and Pollution Load forwarded to treatment. This may take the form of, but will not be confined to, the following mechanisms:

- Utilisation of fittings that promote conservation of water;
- Rainwater harvesting;
- Prohibition on use of in-sink macerators.

Foul Sewers

It is envisaged that the foul drainage network will comprise of:

- **Trunk Sewer:** It is the intention of Meath County Council that the Bryanstown Trunk Sewer is extended to serve the proposed catchment and additional sub-catchments outside the Area Plan Boundary. The trunk sewer is to be routed through open spaces, where possible, with wayleaves in accordance with GSDSDS recommendations unless agreed otherwise at planning application stage. Design and construction will be carried out by developers to specifications and construction standards to be agreed in writing with the Council.
- **Foul Water Drainage:** A trunk sewer should be constructed along the length of the Mill Road to serve existing dwelling and lands east of the Railway line that drain towards it. Due to the existing topography, it will be necessary that gravity sewer connects to a header manhole and is pumped along Marsh Road to the WWTP. Meath Co Co should commission feasibility studies to examine drainage options for this area.
- **Collector Sewer:** To serve sub-catchments of the development area and lands which drain naturally towards the Drogheda Borough drainage network. The collector sewers are to be constructed in open spaces, where possible. Connections from the Collector Sewer to Trunk Sewer are to be kept to a minimum; therefore medium sized sub-catchments are to be catered for by collector sewers.

Individual Development Drainage

Within individual developments, collector sewers will not be permitted in individual gardens or private areas. Each house will, insofar as possible, have an individual connection to a manhole or approved saddle connection to the collector sewer.

Guidelines Documents

The Council consider the recommendations of the Greater Dublin Strategic Drainage Study (Volumes 1-5) and the Greater Dublin Regional Code of Practice for Drainage Works as guidance in respect of a drainage philosophy and standards that would be acceptable. The Local Authority may specify further requirements with regards to design and construction to cater for site-specific requirements.

Objectives:

FWD1 *To co-operate with adjoining authorities to continue the sustainable development and improvement of the wastewater systems to meet the anticipated drainage requirements of the region.*

FWD2 *To implement the policies developed for the Greater Dublin Region by the Greater Dublin Strategic Drainage Study (GSDSDS) and to ensure that all developments will have regard to the policies as expressed in the GSDSDS with particular reference to:*

- a. *New Developments*
- b. *Environmental Management*
- c. *Inflow, Infiltration and Exfiltration*
- d. *Natural Amenities and Recreation*
- e. *Climate Change*
- f. *Basements*
- g. *Surface Water Management*

FWD3 *To co-operate with the adjoining Planning Authorities of Drogheda Borough Council and Louth County Council to increase the capacity of the Drogheda Wastewater Treatment Plant to service the settlements of North-East Meath in the immediate future, and, to jointly investigate proposals for the future upgrade/extension of the treatments plants to provide for a long-term solution for wastewater treatment in the region.*

FWD4 *To review and seek to implement the findings of the Feasibility Study as published by J.B. Barry & Partners, Consulting Engineers (published August 2004), into wastewater treatment solutions for the East and South-East region, thus allowing the Drogheda Wastewater Treatment Plant to serve the long term needs of Drogheda and Environs.*

FWD5 *The construction of the Bryanstown Sewer shall be constructed in accordance with best practice from a technical and environmental perspective. Where required, sections of the proposed route of the Bryanstown Sewer shall be constructed in tandem with the construction of the M1 to R132 Link Road.*

5.12.3 Surface Water Drainage (Flood Protection and Sustainable Urban Drainage Systems)

Flood Protection

The accepted policy response to flood protection is now to manage the risk to life and property as sustainably as possible and to consider the flood risk and its related impacts on development on a catchment basis, rather than on an individual basis. This approach facilitates sustainable development through the reduction of future flood damage, and hence reduce the associated potential economic and social costs.

The Greater Dublin Strategic Drainage Study (GSDSDS) considered the issue of flooding at a regional level and the recommendations of the GSDSDS have been incorporated into development assessment criteria and/or development management standards by Meath County Council.

All new developments must be designed and constructed to meet the following minimum flood design standards and the projected impacts of Global Warming must be taken into account in the design:

- For urban areas or where development (existing, proposed or anticipated) are involved – the 100 year flood;
- For rural areas or where development (existing, proposed or anticipated) are involved – the 25 year flood;

Developments adjacent to watercourses will be required to ensure that there is adequate provision for access to allow maintenance and clearance, future improvement works or emergency works. A set back of 5 – 20 metres is required depending on the width of the watercourse.

Sustainable Urban Drainage Systems

For future development, Meath County Council require that all developments incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of development proposals to reduce the rate and quantity of runoff.

All new developments are to provide attenuation to limit the out-flow to that which occurs prior to development.

Compliance with the recommendations contained in Technical Guidance Document, Volume 2, Chapter 4 of the Greater Dublin Strategic Drainage Study shall be required in all instances.

Guidance Documents

Guidance in respect of SUDS philosophy is also provided in the following CIRIA Publications:

- Sustainable Urban Drainage Systems-Design Manual for Scotland and Northern Ireland;
- Sustainable Urban Drainage Systems-Best Practice Manual;
- Sustainable Urban Drainage Systems-Best Practice Manual and Drainage of Development Sites-A Guide,
- The SuDS Manual (C697)

Proposed Surface Water Management

A Proposed Surface Water Management Plan will be required in respect of the overall development area, which shall be based on the SuDS Design philosophy. This will incorporate an integrated approach to the management of runoff from each individual unit, development, designated neighbourhood and the South Drogheda Environs as a whole, so that a universal

and consistent approach to provision of an overall functional solution to surface water management is adopted. The plan shall be submitted to Meath County Council for approval and modified as required prior to commencement of development worked. All developments shall be required to submit individual drainage proposals consist with the overall plan.

Design options shall recognise the importance of minimising the impact of attenuation features on the utilisation of open space for recreational purposes. All proposals relating to the alterations of streams and flood plains shall be subject to detailed landscape and ecological assessment.

The following issues shall be specifically addressed in the plan:

- Protection of water quality in receiving watercourses and groundwater;
- Stream Regime Protection – minimisation of ecological and physical impacts on receiving streams;
- Level of Service Protection – protection of site from flooding of drainage system;
- Stream Flood Protection – minimisation of risk of downstream flooding;
- Site Flood Protection – control of flooding of site during extreme events.

Subject to detailed studies (including flow studies) of the existing flow regime, alternative arrangements may be considered. Developers will be required to submit a Management and Operation Plan for construction and post construction phases of all elements of the integrated surface water drainage system, which will adequately address the on-going operation and maintenance of all elements of the system including ongoing maintenance of the stream channel, attenuation facilities, pipelines and flood plain.

Upgrading of Streams

The design capacity for the upgrading of local streams in the Bryanstown and Mill Road/Marsh Road areas shall be for 100-year flood. Due cognisance shall be taken of more severe storms in design of open spaces and developments with flood risk analysis for 200-year storm to be undertaken to identify areas that may be inundated should the stream overtop its banks.

The design capacity should also make allowances for projected impacts of Global Warming and resultant increased rainfalls.

The number of outfalls to streams shall be kept to a minimum and shall be designed such that scouring and bank damage is prevented through means of effective energy dissipation and environmentally sensitive bank and bed reinforcement.

Works on streams, culverts and bridges shall incorporate recommendations from both Eastern Fisheries Board and the Office of Public Works who shall be consulted at an early stage in the design process.

Objectives:

SWD1 *To control development in the natural flood plain of rivers and streams and develop guidelines, in co-operation with the adjoining Local Authorities, for permitted development in different flood risk category areas. Particular regard shall be had*

to the Draft Planning Guidelines on Flood Risk Management issued by the Department of the Environment, Heritage and Local Government, or its replacement.

SWD2 *Development should not itself be subject to an inappropriate risk of flooding nor should it cause or exacerbate such risk at other locations. Development that is sensitive to the effects of flooding will generally not be permitted in flood prone or marginal areas.*

SWD3 *To require all significant developments impacting on flood risk areas to provide a Flood Impact Assessment, to identify potential loss of flood plain storage and how it would be offset in order to minimise impact on river flood regime.*

SWD4 *To require all developments to provide 'Sustainable Urban Drainage Systems' (SuDS) as part of their development proposals.*

SWD5 *To require all developments to provide a Surface Water Management Plan for the overall development area. Such Plan to be based on the SuDS Design philosophy.*

SWD6 *To require all developments to submit, prior to commencement, details of Sediment and Water Pollution Control Plan, for agreement of the Drainage and Environmental Departments.*

5.12.4 Utilities

Adequate ducting is to be provided to cater for the current and anticipated future utility provision. A written agreement will be required with the duct providers and the Council to ensure that service providers will be leased ducting, subject agreeing to share duct space with competitors where this is technically feasible.

Proposed Electricity Supply

3 No. Existing overhead High Voltage lines will be required to be routed underground where the route crosses the South Drogheda Environs, the new route should be located along an accessible route. The three lines will be rerouted locally along access routes to avoid development areas. Way Leave access over the cables will be required by the ESB. There will also be restrictions on the proximity of development to the underground cables.

Future Infrastructure provision by ESB include a 38kV Substation in Bettystown and a site has been identified with IDA owned lands for 110kV sub station, from which the lands within the local area plan will be served.

Secondary distribution at 10kV will be by means of cables installed along public routes to localised 10kV/ 400V sub-stations. These sub stations shall provide power to all low voltage customers and large single users (at 10kV)

Residential and commercial schemes are to have sub-stations provided. Public and amenity lighting schemes are to have mini-pillar/distribution pillars/sectional pillars provided.

All sub-stations are to be located as determined by the developers

and local authority in conjunction with ESB Networks.

Sub-station buildings and/or compounds are to be constructed in accordance with ESB networks specifications. Connection from the network to the premises/development will comply with national code of practice for customer interface as issued by ESB networks. Generally pipe ducts shall be installed 900mm (min) below finished ground level and 500mm radially away from other services.

Compliance with standards, specifications and codes of practices shall be the edition current at time of construction.

Proposed Gas Supply

Distribution Lines

All residential and commercial developments in the South Drogheda Environs will be connected to the national gas network.

It will be a requirement to upgrade and enhance the network as necessary in consultation with Bord Gais including the installation of necessary above ground installation (AGI's). Bord Gais will require way-leave access over the pipework. There will be restrictions on the proximity of development to the underground pipes. Connections to the exiting network shall be provide where appropriate by Bord Gais or a Bord Gais appointed contractor. All trenches constructed for accommodating gas mains shall be provided by the appropriate developer and are to be constructed in accordance with the requirements as set out in the Bord Gais Guidelines and Irish Standards Publications.

General details of developers, total numbers of business and residential units required for Bord Gais Network design. Detailed site layout drawings with proposed meter positions, a project programme as well as a site location map shall also be required by Bord Gais. All information required is obtainable from Bord Gais at plans@bge.ie .

All Gas trenches are to be placed in accordance with the requirements as set out in the Bord Gais Guideline Publications.

Transmission Lines

BGE monitor activities within 400m of the Pipelines. Should developments take place that would alter the classification of a locale from 'rural' to 'urban' then BGE would take the appropriate measures, including diversions, to ensure the Pipeline is operated in accordance with the relevant Irish Standard, IS328.

Neither excavation nor development may take place within a BGE Wayleave unless permission, in the form of a valid Excavation Permit is granted by BGE. Such permission will not be unreasonably withheld.

It is likely that the Pipeline will need to be either protected or diverted to facilitate the proposed Distributor Road. If protection only is required then the Standard RC Protection Slab will be needed.

BGE may however need to divert the Pipeline should levels clash. Any such diversion would be paid for by the Developer/ Local Authority.

Proposed Telecom Supply

Meath County Council support the development of the open access ducting network to support telecommunications, this shall consist of 4 No 100mm ducts with 25mm branch connections from access chambers or swept tees to each house/unit. Such a network shall remain in the ownership of the developer until taken in charge by the Council and shall be made available to all service providers on a non-exclusive lease basis on a minimal cost. The network shall support the provision of universal access to competitive telecommunication services, broadband and digital television to further enhance the attractiveness of Drogheda for inward investment and as a place to live.

Due to the demand for broadband and its impact on the existing network, Eircom have indicated that an additional exchange is likely to be required in order to adequately service the area. This would ideally be located midway along the proposed M1 to R132 Link Road.

Ducting and site infrastructure will be placed in accordance with the requirement of the service provider. Arrangement of exchange buildings, comms towers containing antenna, microwave dishes etc, shall be agreed in advance such that their location, design and access thereto are compatible with the design strategy for the area including the Urban Design Framework of this document. Ducting shall be installed underground to provide a comprehensive network which minimises overhead cables. Final connections to premises shall be via underground ducts.

Objectives:

- | | |
|------------|--|
| <i>UD1</i> | <i>While recognising that certain utilities have a monopoly position in respect of the supply of ducted services, the County Council will encourage an open access protocol in respect of the provision of ducting for Utilities</i> |
| <i>UD2</i> | <i>It is an objective that existing overhead lines and all new lines be placed underground throughout the Plan lands. In particular overhead cables will not be permitted within linear parkland areas. Sub stations and other facilities including gas and telecom facilities shall be placed at the least obtrusive locations.</i> |
| <i>UD3</i> | <i>It is an objective to require that all planning applications for significant new development provide for the delivery of broadband infrastructure in tandem with each phase of development.</i> |

5.12.5 Policies in relation to hazardous establishments

The Local Area Plan lands located in County Meath directly adjoin a large tract of industrial lands located within the jurisdiction of Drogheda Borough Council. There are a number of existing establishments located adjacent the administrative boundary with County Meath which are major accident hazard sites. These sites are the following operations: Flogas, Marsh Oil and Irish Flavours and Fragrances. The Land Use Zoning Map (contained at the end of Section 5 of the LAP) has indicated potential zones of impact of these sites where they are relevant to the Local Area Plan which are in the case of Flogas 600m

and Marsh Oil Products 400m. The following policies apply in relation to future development within these zones:

Zone	Indicative Guideline on Development Permitted in Principle
Inner Zone Source – 600 mbar	Industrial (subject to consultation) Occasional Occupation by Small Number
Middle Zone 600 – 140 mbar	Commercial and Industrial <100 persons, retail catering <250sqm
Outer Zone 140 - 70 mbar	Commercial, Retail & Catering, Industrial, Small Housing Developments

The above is an indicative guideline only. Any future development within these areas shall be subject to consultation with the relevant statutory bodies as appropriate.

5.13 Sustainable Design and Building Methods

This Local Area Plan sets out parameters for the sustainable siting, design and construction of buildings, particularly with regard to energy efficiency and energy conservation, as well as waste management and disposal and sustainable urban drainage systems. These standards need to be read and adhered to in conjunction with improved national standards which came into effect from the 1st of July 2008 (Part L of the Building Regulations 2007, as amended).

Measures that promote energy conservation and efficiency in buildings include air tightness, appropriate use of glazing, high insulation standards and more efficient heating. Alternative forms of electricity and heat generation should also be considered. The various elements in relation to energy conservation and ecological building design are further outlined in this section.

Objectives:

SDM1 All planning applications shall demonstrate compliance with the main relevant objectives and principles in relation to sustainable design standards as set out in the Local Area Plan.

SDM2 Large-scale planning applications for residential development (in excess of 50 dwellings) shall include a sustainable design brief compiled by a qualified engineering consultant specialising in sustainable building methods or qualified energy consultant.

5.13.1 Passive Solar Design

Passive Solar Design (PSD) techniques relate to the siting, layout, built form and landscaping of a development. The use of PSD techniques is cost effective, as it requires little or no cost to the developer and can amount to substantial savings on behalf of the owner/occupier. It also reduces the long-term use of fossil fuels and thereby reduces CO₂ production.

The main elements for the application of PSD with regards to design, siting and layout are as follows:

Orientation - To maximise solar access and its benefits the principle façade of a building should be orientated

to be within 30 degrees of south (where feasible). A southerly orientation maximises solar gain in winter.

Openings - Large glazed surfaces should be located on the southern face of the building. These surfaces must be highly insulated through high performance glazing to prevent the loss of heat.

Internal planning - The internal layout of residential buildings should be designed by setting living spaces to the south and service spaces to the cooler north.

Avoidance of Overshadowing – where feasible, buildings should be carefully spaced to minimise the loss of solar gain due to overshadowing.

Objective:

SDM3 The orientation, detailed design and specifications of all buildings in the Local Area Plan lands shall demonstrate how they maximise passive solar gain in line with best practice guidelines.

5.13.2 Low Energy Performance Buildings

All new buildings in the Local Area Plan area will need to demonstrate how they perform with regard to low energy performance standards.

The current minimum energy performance requirements for residential buildings are set out in the Second Schedule to the Building Regulations 1997 (S.I. No. 497 of 1997). Amendments to the statutory regulations came into effect from the 1st of July 2008 (Building Regulations (Amendment) Regulations 2007 (S.I. No. 854 of 2007). It will be a prerequisite of all development in the Plan area that the provisions of the amended building regulations be complied with.

Objective:

SDM4 All planning applications in the Local Area Plan area shall demonstrate compliance with improved energy ratings as set out under the amended building regulations (S.I. No. 854 of 2007).

5.13.3 Renewable Energy Supply

It will be an overall objective of this Local Area Plan that all new buildings in the Plan area will need to utilise renewable energy supply systems to meet at least 50% of a building's space and water heating requirements as calculated on the basis of an approved method carried out by a qualified and accredited expert.

It is envisaged that the space and water heating requirements for future buildings will be met by either some or all of the following technologies:

- **Active Solar Design**

Active solar systems can work in unison with passive systems and provide an alternative mechanism for harnessing solar energy. This system does not rely on site orientation or layout but can be incorporated into any building design to maximise energy efficiency.

Active solar technology involves the installation of a solar collector device; this device absorbs the sun's heat to provide space or water heating. A correctly sized unit can provide around half of a household's water needs over a year; large buildings can introduce several systems to increase solar absorption.

- **Alternative Heating Systems**

Energy-Efficient Heating Systems such as wood pellet stoves and boilers and geothermal heat pumps can greatly help to reduce energy consumption. Geothermal heat pumps (GHP) work by extracting heat energy from a low temperature source and upgrading it to a higher temperature so that it can be used for space and water heating. Heat pumps are very economical. For every unit of electricity used to power the heat pump, 3 to 4 units of heat are generated. They work best in conjunction with low temperature heat distribution systems e.g. underfloor heating.

Wood burning systems do emit carbon dioxide. However, as the wood fuel is cultivated, it absorbs the exact same amount of carbon dioxide as is released when burnt. As such it does not add to the carbon dioxide in the atmosphere. An eligible system can be used for heating a single room, hot water or a whole house.

Objective:

SDM5 All new buildings in the Plan area shall utilise renewable energy supply systems to meet at least 50% of the building's space and water heating requirements as calculated on the basis of an approved method carried out by a qualified and accredited expert.

5.13.4 Reduction in Water Consumption

Fresh water resources are increasingly becoming an issue of environmental and economic importance. According to the European Environment Agency, the average consumption for all households purposes is about 150 litres per capita (1999). On this basis the average water consumption per person in Ireland comes to a staggering 55,000 litres per person per year. The third biggest user of water is the WC, accounting for almost 35% of a person's average daily water consumption. In this regard it is an objective of the LAP that rain water recovery systems be utilised in the construction of new housing as well as the fitting of low-water use appliances.

- **Rain Water Recovery Systems**

Rain water recovery systems harvest rain water which can then be used for the flushing of toilets, washing machines and general outside use. A rainwater-holding tank is installed below the ground that gathers water from the roof of buildings. This water is pumped into a tank within the building's roof space where it is stored until required. This water would otherwise have to be treated and pumped by the local authorities presenting a substantial saving. The system filters and collects between 20% and 30% of total water consumption used by a family of four. The system is isolated from the mains water system to eliminate any possibilities of contamination. In the event of using all of the rainwater reserve, an automatic change over system switches over to using mains water until the rainwater

tank starts to refill. The rainwater system generally has three separate filters which reduce particles down to 130 microns. These systems should have the British Board of Agreement approval to meet the Building Regulations.

- **Low-water use appliances**

It is an objective that all new buildings in the Plan area install low water sanitary appliances to reduce water usage.

Objective:

SDM6 It is an objective of the LAP that rain water recovery systems be installed in the construction of new housing as well as the fitting of low-water use appliances.

5.13.5 Wind Energy

The use of wind turbines to provide a self-sufficient power source or to supply power in combination with other energy sources should be investigated for any large scale planning applications in the Local Area Plan lands. Proposals to provide a limited number of small to medium sized wind turbines within the Local Area Plan lands will be considered favourably subject to a rigorous assessment in terms of the environmental and amenity impacts. In this regard, any proposals for wind turbines need to be subject to a detailed feasibility study taking into account wind speed and turbulence and including full visual analysis and sensitive siting of proposals.

5.13.6 Construction Methods

The use of renewable building materials, such as wood from sustainable managed forests and locally sourced building materials will be a prerequisite for development in the Local Area Plan lands. Other features of construction should also be considered such as off-site construction and prefabrication to minimise the impact of building on the site, reductions in levels of on-site waste and also minimising cost. The re-use of construction waste such as the reuse of excavated material as topsoil should also be considered.

Objective:

SDM7 In the construction process of new buildings in the Local Area Plan lands, it is an objective to achieve the sourcing of building and construction materials locally. Generally, these materials shall be located within a 50 miles radius of the construction site. Exemptions are permissible where it can be clearly demonstrated that the sourcing of particular construction materials is not possible within this radius.

5.13.7 Waste Management And Disposal

It is an objective of this Plan that all future development should seek to minimise waste through reduction, re-use and recycling. Waste management and disposal shall be considered as part of the construction process and in the operation of the development when completed.

- **Construction Waste**

Construction-related waste accounts for about one-third of total land filled waste in Ireland. It is therefore an objective of the Local Area Plan to minimise construction waste for

all new development. During the construction process measures should be implemented to minimise soil removal (as part of the scheme design process), properly manage construction waste and encourage off-site prefabrication where feasible.

- **Domestic Waste**

Everyday domestic waste produced by future residents and businesses shall be minimised through reduction, re-use and recycling. All new development shall provide for waste separation facilities, recycling banks and compost units.

Objectives:

- SDM8 During the construction process measures should be implemented to minimise soil removal (as part of the scheme design process), properly manage construction waste and encourage off-site prefabrication where feasible*
- SDM9 All new developments in the Local Area Plan lands shall provide for domestic waste separation facilities, recycling banks and compost units.*

and Mill Rd/ Marsh Rd extends to approximately 132 hectares (of which approx. 13.8 ha are zoned for low-density residential development).

Further to this, the two areas identified for major residential expansion, Bryanstown and Mill Rd/ Marsh Rd, have been designated as requiring Urban Design Framework Plans to be prepared prior to development taking place in these areas. These framework plans are guided by strict criteria which are set out in Section 5 of the Local Area Plan and relate to the phasing of residential lands and concurrent provision of social and community infrastructure.

It is of paramount importance that the future development of lands zoned under this Local Area Plan depends on the adequate provision of all necessary infrastructure services, in particular the provision of adequate water supply and provision of foul water drainage. Further to this, in the future allocation of services priority will be given to employment generating developments and provision of community facilities.

Objective:

- LU1 The future development of lands zoned under this Local Area Plan is subject to the adequate provision of all necessary infrastructure services, in particular the provision of adequate water supply and foul water drainage. Priority will be given to employment uses and community facilities in the allocation of infrastructure services.*

5.14 Land Use Zoning

5.14.1 Rationale for Land Use Zoning

The Meath County Development Plan sets out clear population projections for the County as a whole and various settlements therein which are in line with recent, updated projections from the Department of the Environment, Heritage and Local Government. The growth projections for individual towns such as Drogheda are set within a clear settlement strategy.

An analysis of the household projections for Drogheda Environs reveals that there is a shortfall in the zoned landbank. There is an additional requirement for approximately 36 hectares (including 50% headroom) to 2013. A potential additional requirement for residential land is needed due to the fact that this Local Area Plan needs to provide for growth up to 2014.

The strategic landbank at Bryanstown (145 ha) was identified under the previous, 2001 County Development Plan as an area “subject to an Action Area Plan”. Further to this, policy SSPOL4 of the Development Plan (as quoted above) identifies the Mill Rd/ Marsh Rd area as providing for additional residential land.

In order to balance the requirements of the Development Plan for further land use zonings in the Mill Rd/ Marsh Rd area on the one hand (SSPOL4) and the need to comply with the Plan’s population projections (SSPOL2) on the other, this Local Area Plan has reduced the residential landbank of the Bryanstown area whilst including additional zoned lands in Mill Rd/ Marsh Rd.

Whereas previously, 145 ha were zoned subject to an Action Area Plan in the Bryanstown area, the combined residential zoned landbank under this Local Area Plan for Bryanstown

5.14.2 Zoning Objectives

The land use zoning objectives applicable to the Local Area Plan and as set out on the Zoning Map (Map 5.3) are in accordance with the objectives set out under the Meath County Development Plan, 2007-2013. For reference purposes, the following objectives (as set out in the Development Plan) apply to the LAP lands:

- **A1 To protect and enhance the amenity of developed residential communities.**

“In A1 zones, the Planning Authority will be primarily concerned with the protection of the amenities of established residents. While infill or redevelopment proposals would be acceptable in principle, careful consideration would have to be given to protecting amenities such as privacy, daylight/ sunlight, aspect and so on in new proposals.”

- **A2 To provide for new residential communities and community facilities and protect the amenities of existing residential areas in accordance with an approved framework plan.**

“The A2 and A4 zones are intended to be the main areas for new residential development. [...] It is envisaged that in the interest of sustainability that the larger tracts of A2 and A4 zoned lands could accommodate ancillary uses such as employment generating uses, community facilities,

local shopping facilities, etc. provided they are appropriate in scale and do not unduly interfere with the predominant residential land use.”

- **A5 To provide for low density residential development in accordance with an approved framework plan and individual dwelling design.**

“In A5 zones where lower densities are envisaged it will be encouraged that given development proposals will be set in a framework plan context, developed by the applicant under the direction of the Planning Authority with special cognisance being afforded to the setting and visual qualities of the subject lands.”

- **B3 To protect, provide for and improve local and neighbourhood shopping facilities.**

“In B1, B2 and B3 zones, it is intended to accommodate the majority of new commercial and retail uses in towns and villages. In particular, B2 zones have been identified to accommodate new retailing functions such as shopping centres and malls. B3 zones apply in some cases to new development areas where it is intended to secure the provision of local shopping facilities but not major centres.”

- **B4 To provide for the development of a retail warehouse park in accordance with an approved framework plan and subject to the provision of necessary physical infrastructure.**

“The objective of B4 zones is to provide for the development of retail warehouse parks. These zones will also allow the displacement of motor car sales outlets from non compatible town centre and edge of town centre locations, subject to their suitable integration within an overall development proposal in the form of a Framework Plan. The preparation of the individual Local Area Plans shall ensure that suitable sites with good access to strategic transportation routes are identified commensurate with the needs of the settlement.”

- **E1 To provide for industrial and related uses subject to the provision of necessary physical infrastructure.**

“E1 zones provides for industrial and related uses subject to the provision of necessary physical infrastructure. They allow the full range of industrial processes to take place within a well designed and attractive setting that provide employment opportunities. Non industrial uses are limited to prevent land use conflicts.”

- **E2 To provide for light industrial and industrial office type employment in a high quality campus environment subject to the requirements of approved framework plans and the provision of necessary physical infrastructure.**

“E2 zones provides for light industrial and industrial office type development in a high quality campus environment subject to the requirements of approved framework plans addressing issues such as built form and general overall layout, transportation, integration with surrounding uses and the range of uses to be accommodated and the provision of necessary physical infrastructure.

The main difference between the two land use objectives relates to the nature of the manufacturing process whereby light industrial is defined in the Planning & Development Regulations 2001, as amended, as “the processes carried on or the plant or machinery installed are such as could be carried on or installed in any residential area without detriment to the amenity of that area by reason of noise, vibration, smell, fumes, smoke, soot, ash, dust or grit.”

The areas identified for “E2” land use in the individual Written Statement and Detailed Objectives for Towns and Villages were primarily new areas that had not been previously developed whereas the areas identified for “E1” land use tended to be existing industrial estates or extensions to same.

It shall be the policy of Meath County Council to apply a more flexible approach to large scale office type development in excess of 200 sq. m. of gross floor area in significant areas (i.e. in excess of 3 hectares of land that is currently undeveloped) of E1 land use zoning objective under the following conditions:

- The preparation of a Framework Plan to ensure the provision of the necessary physical infrastructure, the appropriate density and design of layout and the interface between proposed uses and existing development;
- That all processes being operated in the vicinity of the site, similarly zoned E1, are classified as light industrial in nature, as defined in the Planning & Development Regulations 2001, as amended;
- That the site is located adjacent to a public transport corridor and is served by an adequate road network, and;
- That the application is accommodated by a viable mobility management plan which is to the satisfaction of the Planning Authority and provides for the achievement of acceptable modal shares for both public and private transport within an appropriate timeframe.

No office shall be permitted on E1 zoned lands where the primary use of the office (or service) are provided principally to visiting members of the public e.g. solicitors, health clinic, accountants, etc.”

- **E3 To provide for transport and related uses including the provision of park and ride facilities in association with proposed road or rail based rapid transit corridors.**

“E3 zones have been identified for “park and ride” type facilities near existing and or future public transport corridors.”

- **F1 To provide for and improve open spaces for active and passive recreational amenities.**
- **G1 To provide for and protect existing community, recreational and educational facilities.**
- **H1 To protect the setting, character and environmental quality of areas of high natural beauty.**

“F1, G1 and H1 zones are self-explanatory and relate to community and amenity uses or designations. No residential development shall be permitted on lands that are subject of a deed of dedication or identified in a planning application as open space to ensure the availability of community and recreational facilities for the residents of the area.”

- **WL (White Lands) - To provide for a Strategic Land Reserve to ensure the consolidation of future development in the Drogheda Environs.**

“The purpose of this zoning is to outline the direction of future development in the Mill Road/marsh Road area of Drogheda. It is envisaged that lands presently zoned WL will act as a strategic land reserve and develop in a sequential approach thereby consolidating development in future plans for the Drogheda Environs subject to a detailed feasibility assessment with regard to the necessity for the development in this area”

5.15 Specific Development Objectives

The zoning map for the Local Area Plan lands (Map 5.3) sets out a number of specific local objectives for the Local Area Plan lands. These are as follows:

Specific Local Objectives

- DE1 *To protect the integrity and setting of the Boyne Valley, Boyne Navigation and Battle of the Boyne site from intrusive development in nearby residential or industrial areas.*
- DE2 *To provide for a Park and Ride facility and integrated shuttle bus service. The Park and Ride facility should be accessed off the Donore Road (via the access road to the retail park) and new pedestrian linkages to the surrounding employment area from the Park and Ride facility should be provided.*
- DE3 *To facilitate and encourage the development of the area bounding Mathews Lane for housing development and providing for the upgrading of this lane, and the provision of acceptable wastewater disposal arrangements in co-operation with Drogheda Borough Council.*
- DE4 *To protect Eagle Lodge House, a Georgian era dwelling on the R152 Duleek Road.*
- DE5 *To provide for an upgrade of the Beymore Road as a strategic link between Drogheda Town Centre and new development at Bryanstown.*
- DE6 *To develop a link road between the M1 Motorway and R132 at Colpe Cross as a local distributor road.*
- DE7 *To upgrade the Mill Road and Marsh Road to provide for pedestrian footpaths and to provide on-street cycle tracks along the entirety of these roads. Further to this, a transport study should be carried out to ascertain the appropriate size, specification and location of a new river crossing*

- to link the proposed distributor road with the proposed Northern Port Access Route provided on the Northside of Drogheda in Co. Louth (in line with the recommendations of the Planning Strategy for the Greater Drogheda Area).*
- DE8 *To provide for a link road through the Mill Road/ Marsh Road District providing access to the lands and functioning as a local distributor road.*
- DE9 *To provide a segregated pedestrian and cycle link from the Mill Road/ Marsh Road Area to Drogheda train station.*
- DE10 *To provide for an education campus incorporating a primary school, post-primary school and associated adult education facilities.*
- DE11 *To safeguard access to the lands behind the IDA Business park. Access shall be provided from the Donore Road via the IDA Park.*
- DE12 *To pursue the development of the Bryanstown Cross Route in association with Drogheda Borough Council and to ensure individual developments on or about its corridor do not prejudice its development or facilitate it as appropriate.*
- DE 13 *To provide for a new minor distributor road which shall include the provision of cycle lanes from the proposed Major Distributor Road in the Mill Road area to the McBride train station located in Drogheda Borough Council area.*