DUNBOYNE NORTH MASTERPLAN - MP22

/ TO IL

October 2022 Version 1



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1.0 INTRODUCTION

bank over a period of time.

It provides a strategy for delivery of a sustainable live work community at Dunboyne North in accordance with Development Plan objectives and their alignment with the physical site context or constraints. National policy and guidance has also informed the development strategy set out in herein.

The Masterplan thereby provides a roadmap for development delivery and is designed as an iterative document that will be reviewed and updated with the Executive of Meath County Council as required in line with emerging planning policy and development requirements.

Any Planning Application for the development of the Dunboyne North lands should be aligned and consistent with this Masterplan, which will need to be developed and assessed through detail design and consultation with stakeholders and the Local Authority. All layouts shown are therefore indicative.

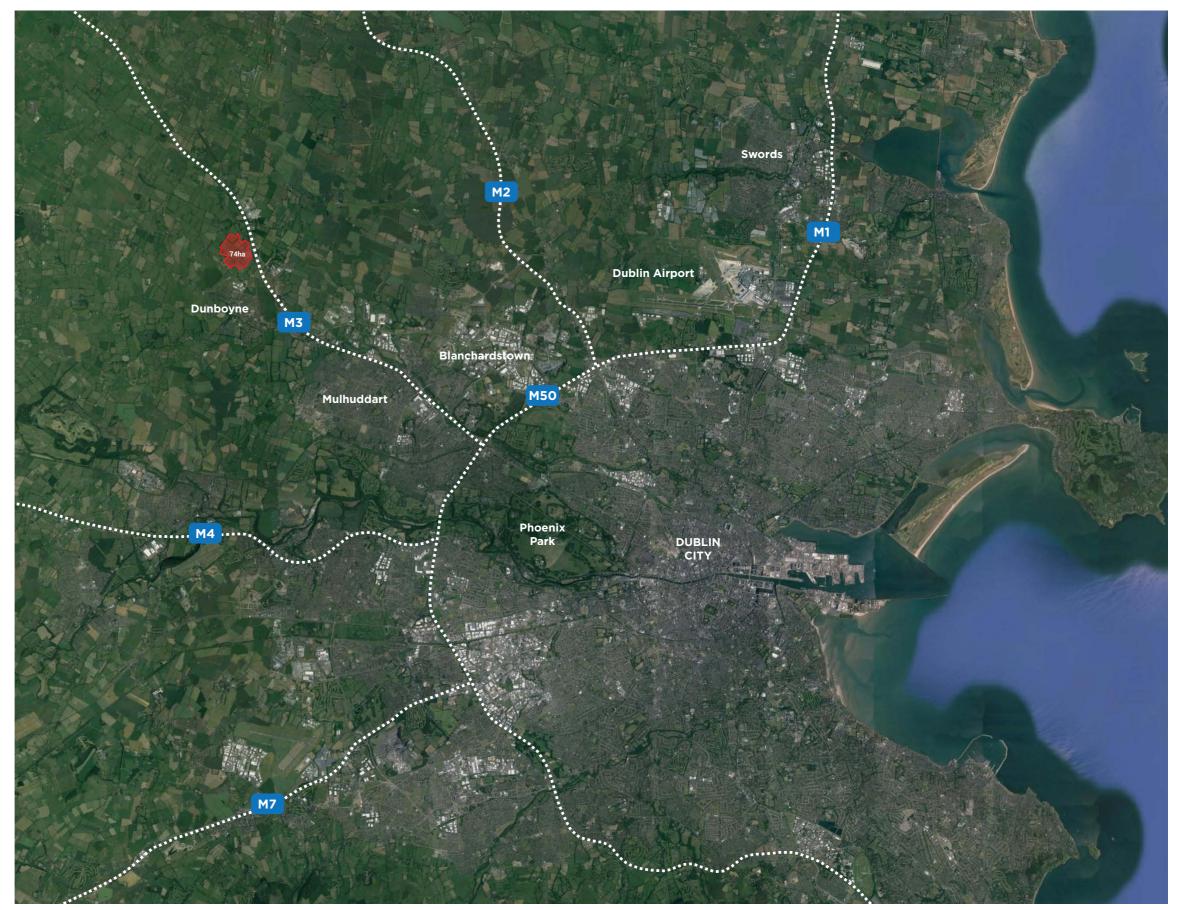
The phasing of development including supporting infrastructure - transportation, utilities, community, amenity, commercial - is detailed to ensure that infrastructure delivery is provided in tandem with and proportionate to the extent of development in a given phase.

The purpose of this Masterplan is to distill the vision and development objectives set out in the Meath County Development Plan 2021-2027 in order to inform the realisation of development on the overall land 2.1 Site Location

The lands to which the Masterplan relates are located to the north of Dunboyne, Co. Meath. Dunboyne is approximately 18km from Dublin city centre and is located within the M3 transportation corridor. Dunboyne is also served by an existing diesel rail line which is planned for electrification by 2027 and by the Dublin Bus service. The town has a population of 7,272 persons in 2016 and is identified in the County Development Plan, 2021-2027 as a self-sustaining growth town with a moderate level of employment, good transportation links and capacity for continued commensurate growth to become more self-sustaining. The Dunboyne Target population growth to 2027 is 10,572 with a housing allocation of 2,002 units from 2021-2027.

Dunboyne is accessed from the M3 via Junction 5 to the north-east of the town, which is the junction most proximate to the Masterplan lands, and via Junction 4 to the south-east of the town. Dunboyne railway station is located on the eastern edge of Dunboyne and the majority of urban development is located to the west of the north-south orientated rail line. The centre of the town is predominantly office/ commercial/educational land uses surrounded by estate type residential development to the north and south of the L2228 road which runs in an east-west direction. Some industrial development, predominantly in the form of retail warehousing, light industrial or employment categories is located on the northern fringe of Dunboyne.

Dunboyne is the only settlement in Meath situated within the Dublin Metropolitan Area and forms part of the North-West Strategic Development Corridor, identified as having current and future development capacity to accommodate significant residential and employment growth.





2.1 Site Location

The Masterplan lands are located to the north of Dunboyne and are focused on the M3 Parkway Railway Station and adjacent to the 1,200 space commuter car park. The R157 is the main road link between Dunboyne and the subject lands although there is a private road link from Dunboyne to the car park which is unsuitable for vehicular traffic but would support pedestrian or cycle traffic. The Masterplan lands are bisected by the R157 with approximately one third of the subject lands lying to the east of the R157 and the remaining two thirds to the west of this regional road.

The subject lands are currently in agricultural use and the visual context is one of large fields bounded by hedgerows and tree lines. The Tolka River runs along the eastern and northern sections of the Masterplan lands in a slight valley but the remainder of the lands are predominantly flat with no prominent topographical features present. There are no Protected Structures located within the subject lands and neither is there an Architectural Conservation Area or a Zone of Archaeological Interest within the Masterplan area. There are 3 no. recorded monuments within the Masterplan area, 2 no. located on the R157 north of the M3 Park and Ride facility and 1 no. west of the M3 Parkway station. There are no European designated sites within the Masterplan area and the nearest European site is a Special Area of Conservation: Rye Water Valley/Carton [001398] which is located approximately 7km to the south-west of the subject lands.







2.2 Links

The strategic attributes of Dunboyne North to accommodate regional level growth include:

- Parkway train station which provides regular services to the City Centre. Proposals for the extension of the DART line to the M3 Parkway are being advanced by CIE, with the Railway Protection Order submitted to An Bord Pleanála in July 2022.
- A Park & Ride facility for 1,200 cars
- Adjacency to the M3
- Proximity, accessibility and connectivity to the established urban area
- Existing road and movement infrastructure with the capacity to accommodate the planned growth.
- The River Tolka with potential for high quality landscape and amenity value, its potential as a movement corridor, and biodiversity.
- Significant recent investment has made the area attractive to foreign direct investment and will assist in attracting further FDI to the area.
- The presence of major employment nodes in the immediate vicinity including Bracetown Business Park, Shire, IBM, Altech, Facebook and Kepak.
- The Avoca lifestyle store has added to the profile of the area, enhanced the quality of life for residents and employees in the area and enhances the attractiveness of the area for further FDI.





— Tolka River



2.2 Links

As detailed in Section 2.1 above, the Dunboyne North Masterplan lands have excellent connectivity by public and private transport modes to both Dublin city and the Greater Dublin Area. The close proximity of employment nodes to the Masterplan lands – The Hub Logistics Park, Bracetown Business Park, Shire, IBM, Altech, Facebook, Kepak, Dunboyne Industrial Estate – presents employment opportunities on lands adjacent to the Masterplan lands with consequent reductions in commuter traffic thereby contributing to the fulfillment of sustainable land use planning and mobility management.

Transport links include rail, bus and private car modes as illustrated on the drawing opposite with the M3 Parkway station fulfilling the role of a transport hub and multi-modal interchange. The availability of parking makes the commute by rail to the Dublin Docklands an attractive proposition, however it is envisaged that as new employment generating opportunities develop within the Masterplan lands, commuters will also have the option to travel by rail from Dublin to Dunboyne North. The car park while not included in the existing Masterplan boundary is included within the proposed Masterplan boundary under the Meath County Development Plan 2021-2027.

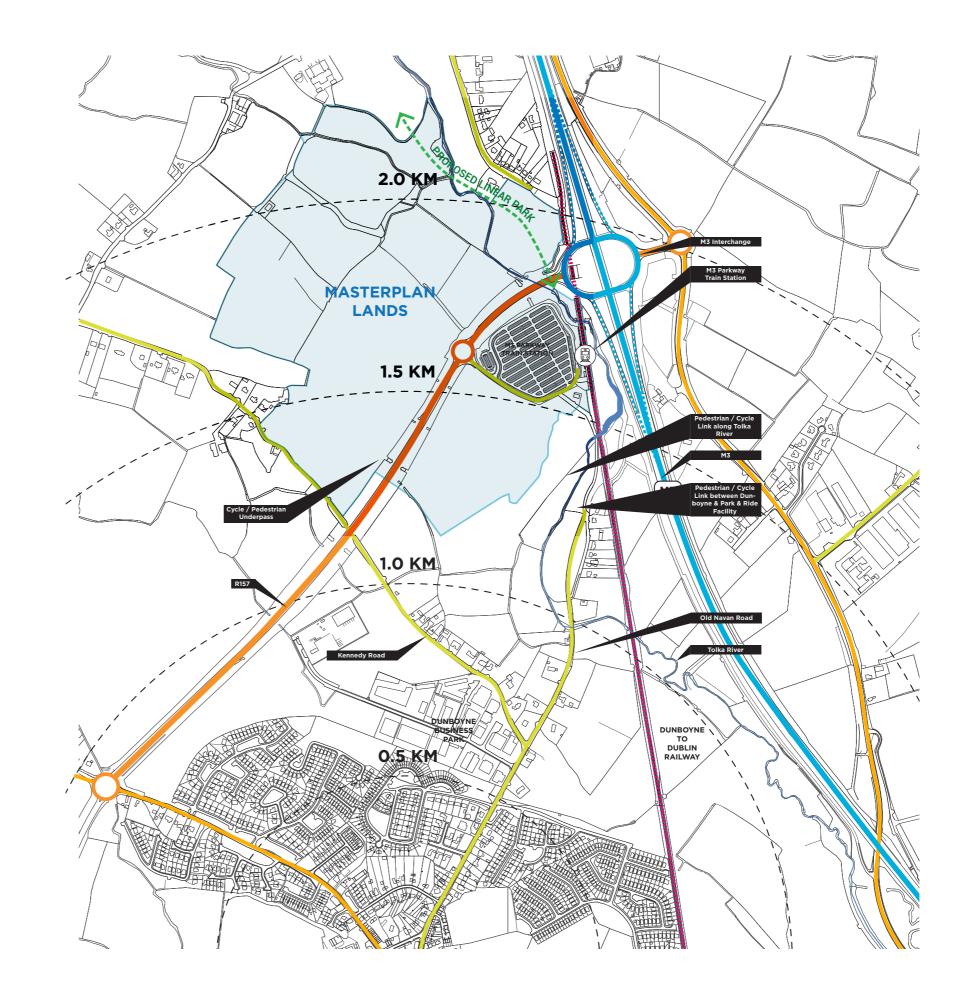
In addition to having excellent road links with Dunboyne village, the majority of the Masterplan lands fall within 2km of Dunboyne town centre. The development of the Masterplan lands represents an opportunity to promote pedestrian and cycle links between Dunboyne town centre and the subject lands. The development of the Old Navan Road and the linear park along the Tolka River will create additional links to Dunboyne town centre, representing a sustainable and healthy option for future residents of the Masterplan lands wishing to travel to Dunboyne.





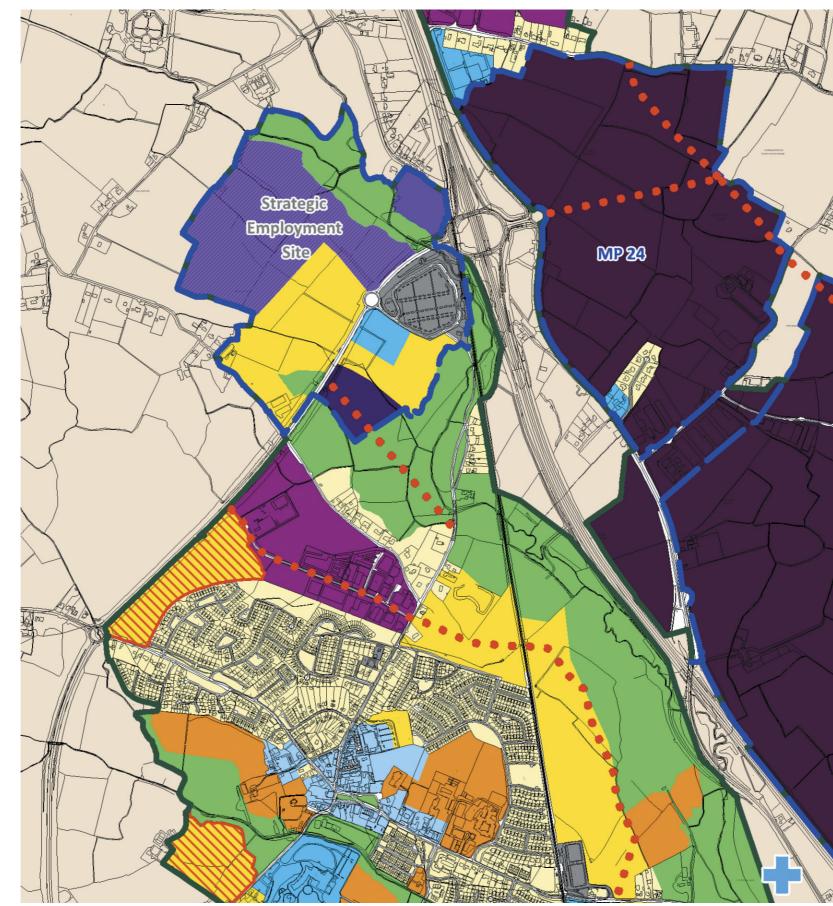


— Tolka River



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2.3 Meath County Development Plan (2021-27)



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LEGEND Zoning Objectives

	A1 - Existing Residential
	A2 - New Residential
	B1 - Commercial Town or Village Centre
	C1 - Mixed Use
	E1/E3 - Strategic Employment Zones (High Technology Uses)/ Warehousing & Distribution
	E2 - General Enterprise and Employment
	E2/E3 - General Enterprise and Employment/ Warehousing and Distribution
	E3 - Warehousing and Distribution
	F1 - Open Space
	G1 - Community Infrastructure
	RA - Rural Area
	Settlement Boundary
	Fingal County Council - Administrative Area
	Masterplan Boundary
	A2 Phasing - Residential land not available for development until post 2027
/////	Strategic Employment Site
• • • •	Transport - Indicative Road Route
+	Future Gateway Building

CONTEXT 2.0

2.4 Meath County Development Plan (2021-27)

The Meath County Development Plan 2021-2027 (MCDP) includes a Written Statement and Land Use Zoning plans for all settlements. These Statements and Maps are included in Volume 2. The Statement for Dunboyne extends to include the neighbouring settlements of Clonee and Pace.

The Dunboyne, Clonee and Pace written statement is presented in 7 sections

1. Introduction - the strategic location of Dunboyne, including its employment and residential lands, along a multi modal road and rail corridor and within the Dublin MASP area is acknowledged. This is recognised in its designation as a 'self-sustaining town scheduled to accommodate significant growth over the plan period'.

A local area plan is proposed to be prepared during the lifetime of the current development plan.

- 2. Town Context / Character the population of the town in 2016 is 7,272 persons, with a projected population of 10,572 persons by 2027. To provide for this, the Core Strategy includes a Housing Allocation for 2021 - 2027 of 2,002 units.
- 3. Vision and 4. Opportunities the MCDP identifies the existing opportunities for the area which they are seeking to build upon to achieve their vision as ' a location of choice'.
- 5. Land Use Strategy "The Development Strategy for the area is to build on recent economic successes and to continue to promote the area as a location of choice for high tech, pharmaceutical, logistics, warehousing, and other employment generating uses. An integrated approach will be taken to transport and land use policy in the area. This will ensure that future investment will be concentrated on strategic employment and residential lands along the M3 Parkway Commuter rail line. Residential growth will also be focused on centrally located lands in proximity to the rail stations in the town."

The following extracts set out the land use strategy for Dunboyne North:-

Residential - "The primary areas for population growth will be in Dunboyne and Dunboyne North adjacent to the M3 Parkway Park and Ride.... The lands at Dunboyne North are zoned for employment, commercial, and residential uses (initial development of 500 units) that are to be developed under the 'live work' community model. ...

A Master Plan is to be prepared for these lands, which have the potential to deliver a sustainable mixed use 'live work' community adjacent to a rail station with the capacity to accommodate employment and residential growth.

The lands at Dunboyne central rail station and the M3 Parkway are considered capable of accommodating buildings of increased height."

Employment and Economy - "At Dunboyne North adjacent to the M3 Parkway Park and Ride Rail Station there are employment lands available that are to be developed as part of a 'live work' community."

Community Building - "The Third Level Education Campus could be accommodated on the Master Plan lands adjacent to the Rail Station in Dunboyne North where students and employees could benefit from access to a rail service which would provide a reliable and sustainable mode of transport to and from the campus."

6. Town Development Policies and Objectives - the following policies and objectives are relevant to the masterplan lands.

DCE POL 1 - To support the development of Dunboyne and Clonee as an enterprise and employment hub that will be complemented by a compact, attractive, and sustainable residential community and urban environment.

DCE OBJ 5 - To prioritise the delivery of residential development on the residentially zoned lands adjacent to Dunboyne Rail Station and Dunboyne North

DCE OBJ 9 - To facilitate the preparation of a Master Plan at: MP22 Lands at Dunboyne North

DCE OBJ 11 - To support and facilitate the provision of new educational facilities for Dunboyne College of Further Education preferably at lands proximate to the rail station at Dunboyne North.

DCE OBJ 15 - To facilitate the development of a pedestrian link over the M3 to support the development of employment lands to the north of Dunboyne.

DCE OBJ 17 - To support and facilitate in conjunction with the National Transport Authority the extension of the existing bus service to the M3 parkway and development lands to the north of Dunboyne.

DCE OBJ 18 - To support the delivery, in conjunction with all relevant stakeholders, of a link road on the lands zoned for new residential development to the east and north east of Dunboyne.

CONTEXT 2.0

2.4 Meath County Development Plan (2021-27)

Masterplans

The subject lands are designated as Master Plan 22 in the County Development Plan (Volume 2, Dunboyne, Clonee & Pace) which necessitates preparation and agreement of a Masterplan for Dunboyne North in accordance with the requirements in Section 7 as set out below.

Dunboyne North Masterplan Objective

Dunboyne North - mixed use lands consisting of employment, residential and commercial lands adjacent to the M3 Parkway Park and Ride facility. No Master Plan has been agreed for these lands.

The requirements of this Master Plan are as follows:

To require the preparation of a Master Plan for Dunboyne North centred around the M3 Parkway public transport hub which shall provide for the creation of a 'live work' community at Dunboyne North. This model shall comprise a balanced mix of complimentary land uses including science park/high technology, logistics, warehousing, neighbourhood retail centre, education (including third level) and residential based on an integrated sustainable "live work" community.

The Master Plan shall be agreed in writing with the Executive of the Planning Authority and shall address land use, transportation, connectivity, urban design, recreation, environmental impacts including flood risk, phasing and implementation issues to the satisfaction of the Executive of the Planning Authority.

The Master Plan shall provide the overall unifying vision and goals for the delivery of the following land uses

- Employment, education (including third level), residential, commercial, and open space/amenity. In i. regard to the residential element of the Master Plan, it shall be a requirement that proposals for the provision of a maximum of 500 residential units in a range of densities to support the delivery of a sustainable "live work" community-based model.
- ii. High end office-based employment which shall be at a level commensurate with its location and proximate to a multi-modal public transport interchange. Strategic employment use predominantly led by a Science Park for Innovation & Research and Educational Facilities or similar high end "E1" officebased uses.
- iii. A pedestrian and cycle route over the M3 Motorway to lands to the east subject to the agreement of Transport Infrastructure Ireland.
- iv. A Linear Park which shall be integrated with future development of the entire corridor area and based on the precepts of the green infrastructure guidance as contained in the RSES 2019-2031.

The Master Plan shall address the following:

- Phasing proposals setting out how the development of the Master Plan will be progressed including i. the mix of uses and physical and social infrastructure to be delivered in each phase. Phase one of any development of these lands shall be required to comprise of the submission of a planning application for an agreed quantum of employment uses.
- An overall design concept for the lands.
- Guidance for high quality design throughout the development iii.
- Building heights and densities. iv.
- A landscape plan inclusive of the Linear Park for the development and landscape management plan ٧. (post-completion of the development).
- vi. Flood Risk Assessment which takes account of the most up to date CFRAM data

A Transport Assessment shall be prepared which addresses the following issues:

- i. Access arrangements to the Master Plan lands.
- ii. Provision of safe cycle ways and pedestrian routes throughout the Master Plan lands connecting to the town centre.
- Provision and access for service vehicles to the lands.

The Master Plan shall be agreed in writing with the Executive of the Planning Authority in advance of any planning application relating to the development of these lands being lodged.

The following high-level strategic principles shall apply:

- The objectives of the Economic Development Strategy for County Meath, including the development of Dunboyne as a "live work " community and one of 5 strategic sites for the County;
- The need to provide an adequate supply of housing and other infrastructure to serve the projected growth in the Metropolitan Area;
- The proximity of the lands in question to transport infrastructure, including a railway station;
- The recommendations of the Transport Study for Dunboyne and Environs (Aecom Transport Consultants);



2.5 Ownership Boundaries

The Dunboyne North Masterplan area represents a strategic land reserve which Meath County Council has recognised in having an objective in the current Meath County Development Plan that the development of the lands are to be subject to the guidance of a Masterplan.

In the case of the Dunboyne North lands, there are four separate land ownerships which are identified on the drawing opposite. This Masterplan has been prepared in consultation with the four landowners to provide the cohesive strategy required for the development of this key strategic site. The respective landowners share a common purpose in developing the Masterplan lands in a planned, phased and sustainable manner and wish to cooperate with existing communities in the area and the Council in achieving this objective.

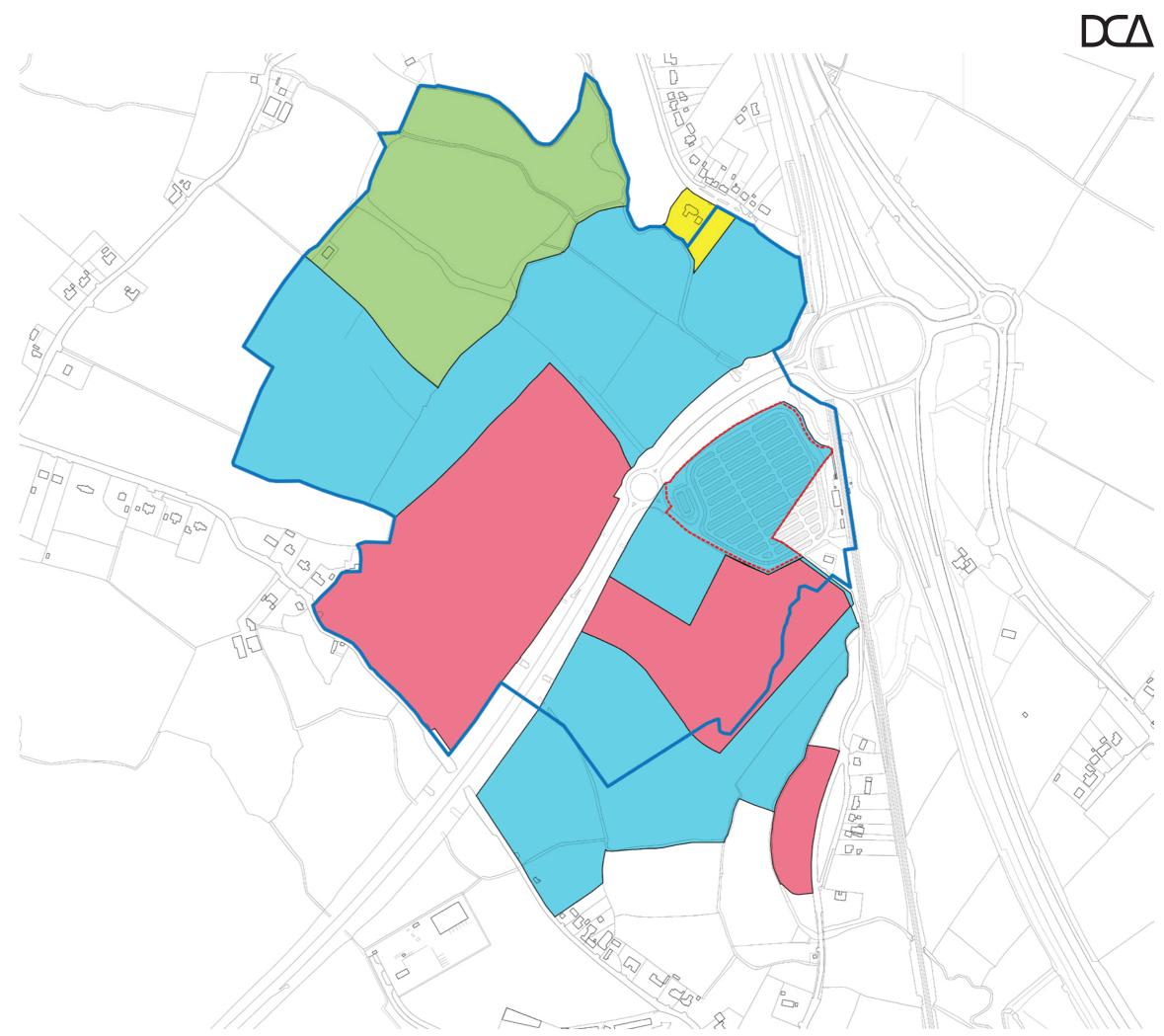
The common wish of the landowners is to see the lands developed as a self-sustaining community where people can live, work and participate in the life of a new mixed-use village which is located proximate to excellent transport links and employment opportunities.

The following sections of the Masterplan examine the critical areas of transportation, green infrastructure and placemaking as well as the issue of employment generating uses within the masterplan area. The issue of phasing of the proposed development is also set down below in the Masterplan in order that development is carried out at an appropriate pace and that the necessary mix of uses – residential, retail, community and employment – proceeds in a coordinated and sustainable manner.

- Dunboyne Masterplan Lands



CIE Lease



3.1 Transportation Study at Dunboyne & Environs

The Transport Study for Dunboyne and Environs (2018) was prepared with the aim of delivering a multimodal strategy that will enable the lands to develop as a sustainable community with strong transport links to Dunboyne town centre, Dublin City and the surrounding area.

The strategy seeks to realise the following objectives:

- 1. Improve transport connectivity and accessibility within Dunboyne
- 2. Improve accessibility to other urban centres and new growth areas outside Dunboyne
- 3. Contribute to improved air quality by minimising the growth in traffic levels and congestion
- 4. Improve journey time reliability
- 5. Make it easier and more attractive to travel by active and public transport modes

The Transport Study highlights the strategic location of Dunboyne within the Dublin metropolitan area, recognising that future growth assumptions should be responsive to the objectives of the Regional Spatial and Economic Strategy (RSES) and growth targets in the Metropolitan Area Strategic Plan (MASP), with a focus on connecting people and places irrespective of quanta to ensure the longevity of the plan.

To support the growth targets for Dunboyne, the strategy contains a series of proposed transport interventions which are to be implemented on a phased basis as the lands are developed to provide for a coordinated approach to the planning of improvements and upgrades to the transport network. The proposed transport interventions encompass a series of road, active travel and public transport measures intended to encourage the sustainable development of Dunboyne and its environs.

In this context, a significant proportion of planned growth for Dunboyne is to be accommodated in Dunboyne North. To facilitate this growth, the Transport Study identifies a number of specific transport interventions to facilitate future development of the Dunboyne North lands as follows:

Roads Infrastructure

- **R157 Junctions (R5 and R6)**: Replacement of the existing roundabout on the R157 with traffic signals (R5) and provide a new signalised junction (R6) facilitating ease of movement for all road users. The traffic signals will provide safe passage across the R157. (Points 1 & 2 over)
- Old Navan Link Road Extension to R157 (R7): The extension of this link will provide a direct connection for all road users between the Masterplan Lands and Dunboyne Town Centre. (Points 2 & 3 over)

Active Mode Measures

- Paths from Woodpark Road to M3 Parkway (A2): Proposal includes for an upgrade of an existing path as well as a footbridge over the River Tolka to connect existing and future communities residing to the north of Dunboyne to the M3 Parkway Station and beyond to the Town Centre.
- Dunboyne North Pedestrian/Cycle Network (A5) and Old Navan Road Pedestrian / Cycle Link (A6): Development of a pedestrian cycle spine through the Dunboyne development lands linking the north of Dunboyne to the M3 Parkway Station and beyond to the Town Centre via high quality linkages that will be provided prior to first occupation.

These recommended transport measures have informed the approach to future development outlined in this Masterplan. Planning for the first phase of development in the Masterplan lands will seek to implement appropriate transport measures for Dunboyne North in tandem with development. In addition, development proposals will be underpinned by design principles that further promote the creation of a sustainable livework community.



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Legend

	Existing Roads
	Pedestrian / Cycle Connections
	New Roads
	Improved Roads
\bigcirc	Redesigned Existing Junction
\bigcirc	New Road Connection

- R5 Upgrade of the existing R157 3-arm roundabout to a 4-arm signalised junction, incorporating a pedestrian crossing at each arm. The redesigned junction shall have an increased capacity, ensuring efficient access both to the development lands to the west and to the M3 Parkway rail station to the east. The safety and convenience of pedestrian and cyclist movements through the junction shall be significantly improved.
- 2 R6 New 4-arm signalised junction at the intersection of the proposed new link road with the R157, incorporating pedestrian crossings. This junction will provide vehicular access from the development lands to the R157 and the M3 Pace interchange, as well as improving east-west pedestrian and cyclist permeability across the R157.
- 3 R7 Connection of a new link road to the existing local road at Bennetstown.

Ownership Legend



Glenveagh

- McGarrell Reilly
- Woodpark Stud
- Padraic Tierney

3.2 Transit Orientated Development

Aligning Live-Work Community Principles with the Transit Orientated Development Approach

Transit Orientated Development (TOD) is underpinned by the principle of integrated transport and land use planning that promotes best use of existing and planned transport infrastructure and encourages sustainable and active travel modes. It involves the co-ordination of transport and development planning with the aim of creating vibrant spaces to live and work that are accessible to a wide range of services/amenities and high quality far-reaching public transport. Transit Oriented Development increases demand for public transport services, providing a greater return on investment and supporting the financial viability of further investment.

A Transit-Oriented Development is one which provides the following standards:

- 1. WALK: Develop neighbourhoods that promote walking
- 2. CYCLE: Prioritize non-motorised transport networks
- 3. CONNECT: Create dense networks of streets and paths
- 4. TRANSIT: Locate development near highquality public transport
- 5. MIX: Plan for mixed use
- 6. DENSIFY: Optimise density and transit capacity
- 7. COMPACT: Create regions with short commutes
- 8. SHIFT: Increase mobility by regulating parking and road use

Urban form and layout is key to creating an appropriate live-work community that aligns with the TOD approach, including compact, walkable communities linked by efficient transit options. This masterplan therefore seeks to deliver a modern 21st century live-work community based around flexibility, mixed-use, and proximity to public transport.

Site Layout & Integration Between Transport and Street Design

The attractiveness of public transport is dependent on ease of accessibility and frequency of services. The street design and layout should be developed in accordance with sustainability objectives to encourage walking and cycling.

Transport Resilience

Substantial additional carrying capacity is planned on the M3 Parkway rail line as part of the DART + expansion programme. Initially it is planned to deliver additional carriages, followed in the longer term by electrification, upgrade and more frequent rail services which will see a train depart every 12 minutes in the peak hour. Customer capacity and train service frequency on these lines will be significantly increased as a result of the programme, delivering a more efficient transport system that allows more people to make sustainable travel choices to meet the goals set out in the State's Climate Action Plan.

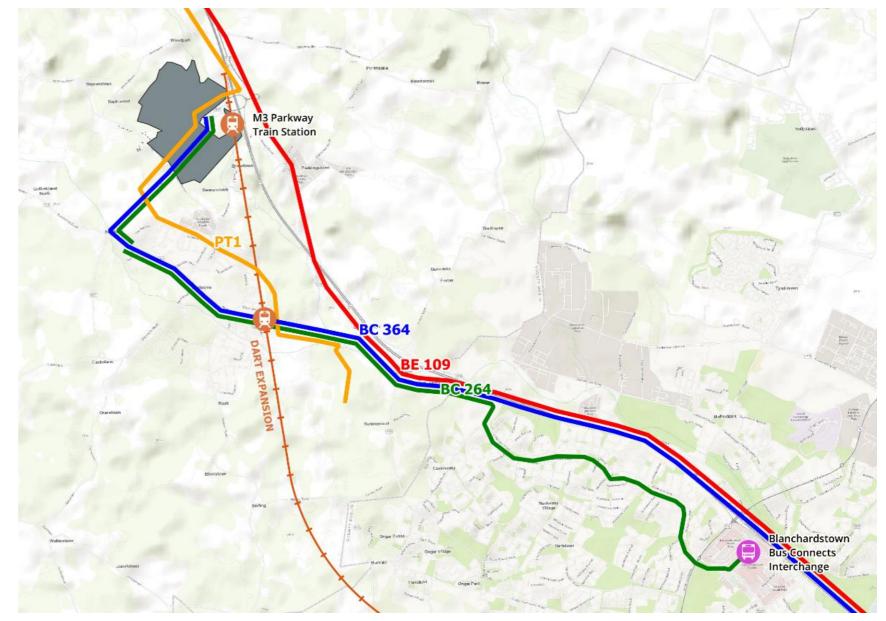
The planned BusConnects programme designates the N3 Navan Corridor as a 'spine' route which will operate between Blanchardstown and Dublin City Centre with continuous bus priority. Once implemented, Dunboyne will be served by routes 70 and 270 (renamed 364 and 264 respectively) which shall be extended from Dunboyne Town Centre to M3 Parkway to create a multi-modal interchange. These routes will become high frequency feeder routes to a major bus interchange at the Blanchardstown Centre.

Parking

Car parking for commercial, residential and other land uses within the Dunboyne North lands will be provided in accordance with the relevant Meath County Development Plan standards and in cognisance of public transport availability which is anticipated to improve significantly over time.

Mobility Management

To encourage the use of sustainable travel modes and reduce dependence on private cars to access or live on the site, it is anticipated that a Mobility Management Plan (MMP) will accompany development proposals. The aim of a MMP is to improve accessibility by enabling and promoting sustainable 'smarter' travel options (e.g. car sharing, walking, cycling, public transport). This will minimise the proportion of single occupancy vehicle trips and offset potential transport impacts of future residents and users of the site.



3.3 Transport Assessment

Access Arrangements to the Development Site

As a consequence of the introduction of the distributor road from the M3 a number of existing routes were downgraded; particularly the Old Navan Road which no longer acts as a north/south thoroughfare. This lack of a northern link has affected the growth of the village of Dunboyne which has expanded in an east/ west direction.

Dunboyne Bypass (R157): The Dunboyne Bypass is a single-carriageway regional distributor road linking Junction 5 of the M3 motorway to the western periphery of Dunboyne town and the region to the southwest. Access to the centre of Dunboyne can be obtained via the Summerhill Road, which connects to the Dunboyne Bypass at a roundabout approx. 1km to the west of the town centre. A further roundabout approx. 1.1km to the south-west of the town centre provides a connection from the Dunboyne Bypass to Maynooth Road. To the south-west of Dunboyne, the R157 continues for approx. 7.5km, as far as Maynooth in County Kildare.

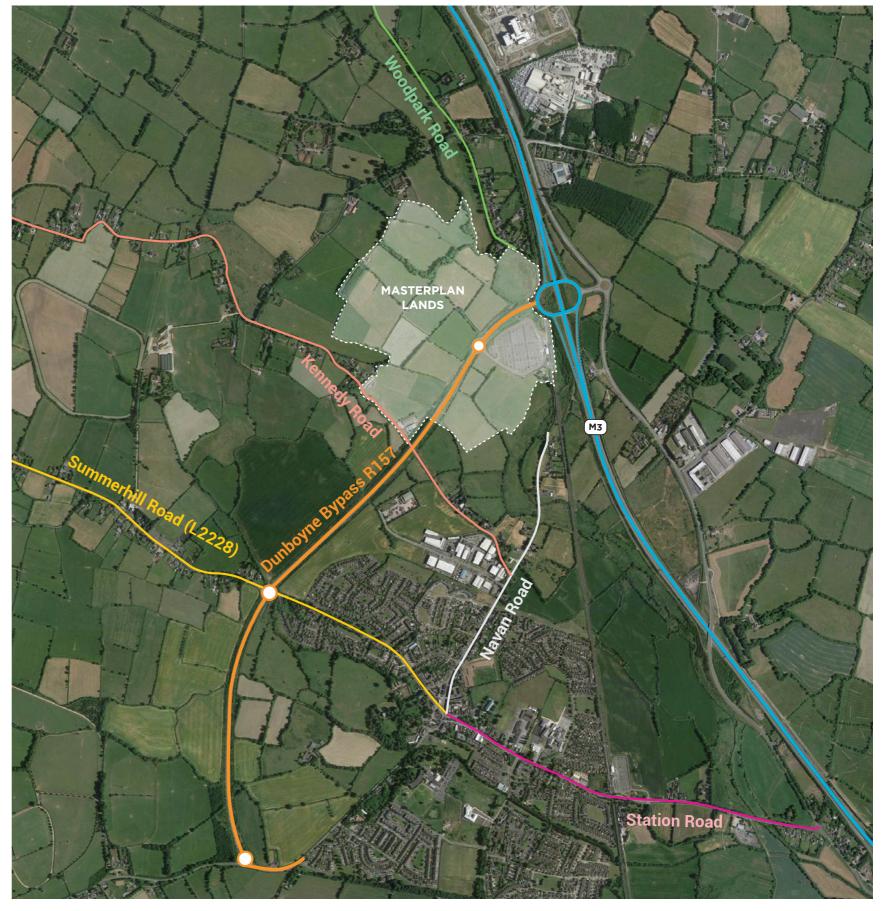
Summerhill Road (L2228): Summerhill Road is a single-carriageway link road extending westward from the centre of Dunboyne town and connecting to the Dunboyne Bypass. A number of existing residential developments are located to the north and south of Summerhill Road and are accessed from it. Beyond the Dunboyne Bypass, the alignment of the L2228 is continued by the R156 regional road, which passes through Summerhill and ultimately connects to the N4 national road on the outskirts of Mullingar (approx. 50km from Dunboyne).

Navan Road: Formerly the principal arterial route into Dunboyne from the north, the single-carriageway Navan Road has been truncated by the construction of the M3 motorway and now functions as a local road serving housing on the northern side of Dunboyne, as well as giving access to the Dunboyne Industrial Estate. Navan Road now terminates approx. 350m to the south of the M3 Parkway railway station and no longer provides any connection to lands east of the railway line. An existing pedestrian and cyclist link continues northward from Navan Road as far as the M3 Parkway railway station.

Station Road (L2228): Station Road is a single-carriageway link road extending eastward from the centre of Dunboyne town, on the same axis as Summerhill Road, crossing the railway line via an overbridge and giving access to Dunboyne Railway Station. Existing schools and residential developments are located to the north and south of Station Road and are accessed from it. Beyond the railway station, Station Road continues for approx. 800m and connects to the R147, which in turn provides access southward to Clonee and to Junction 4 of the M3 motorway.

Kennedy Road: Kennedy Road is a single-carriageway local road extending westward from Navan Road, immediately to the north of the Dunboyne Industrial Estate. The road presently passes below the Dunboyne Bypass but does not connect to it and continues to serve a rural area to the west that is characterised by ribbon development.

Woodpark Road: Woodpark Road is a single-carriageway local road serving a small residential area immediately to the west of the M3 motorway and approx. 500m to the north of the M3 Parkway railway station. Woodpark Road does not connect directly to any roads to the south, although an existing pedestrian and cyclist link along the railway line does provide permeability as far as the Junction 5 roundabout on the M3 motorway.



3.3 Transport Assessment

Proposed Transportation Infrastructure

The required road network to serve the Masterplan lands is based around the creation of interconnectivity and permeability to existing and proposed road infrastructure, including the existing rail line at Dunboyne North and the proposed distributor roads serving the development lands.

The location of connections to existing local roads is influenced by the optimum locations for the secondary roads to create manageable plot sizes and takes into consideration the requirement to achieve effective sightlines at junctions with the local road network.

A new primary connection is to be provided from the link road to the old Navan Road, strengthening the links to Dunboyne Town Centre.

Local distributor roads serving sites within the Masterplan lands will run generally east to west and north to south with connectivity to existing road infrastructure. These local distributor roads will create further permeability throughout the site.

Neighbourhood roads (access roads) within the development lands will be designed with appropriate scaling to adjoining developments and to ensure low speed alignments that facilitate pedestrian and cycle movements. Internal access roads will also be designed to create an attractive public realm, especially near public open spaces, to strengthen the new walking network.

The design of the roads and streets shall be in accordance with the detailed guidance in the current editions of Design Manual for Urban Roads and Streets (2013), TII design standards, National Cycle Manual and Smarter Travel Policy.

Pedestrian and Cyclist Permeability

There are limited pedestrian and cyclist facilities adjacent to the development lands at present. Development of a coordinated pedestrian and cycle movement strategy aligned with the Transportation Study at Dunboyne and Environs will ensure permeability to and from Dunboyne, the existing railway station and future development proposals within the masterplan lands.

There is an existing pedestrian and cyclist underpass beneath the R157 which provides safe permeability between the north and south of the R157.

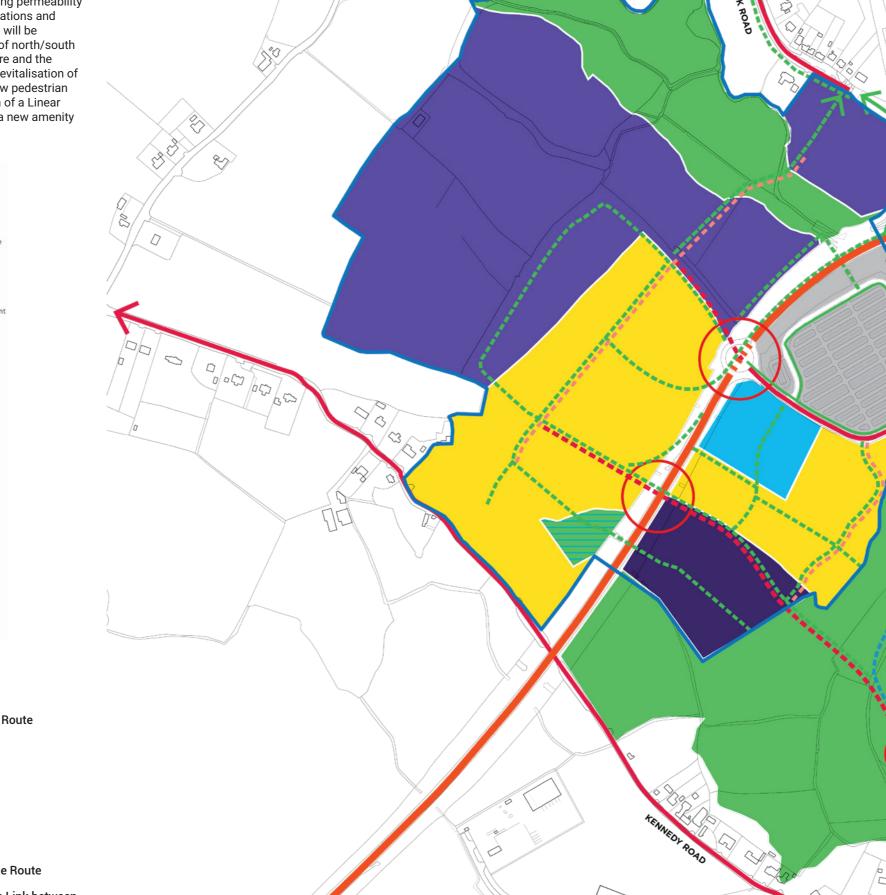
The proposed pedestrian and cycle network improvements will facilitate high levels of pedestrian and cyclist permeability throughout the Masterplan site, as well as from these lands to the M3 Parkway railway station. They shall also bring improvements to the pedestrian and cyclist permeability between Dunboyne North and Dunboyne town centre, which shall in turn reduce dependence upon the private car for those travelling to and from the development lands.

Service Vehicle Access

The proposed road infrastructure will be sufficient to cater for the needs of service vehicles with access and manoeuvrability being catered for in design. Traffic lanes will be 3.0m – 3.5m wide depending on traffic volume and access predominantly restricted to primary routes with limited access to local distributor routes.

3.4 Revised Linkages to R7

The priority of the Masterplan is to create an attractive, sustainable and vibrant destination that supports a move away from car dependency towards more sustainable modes of transport. This includes high walking and cycling permeability offering direct routes to local destinations and public transport stops. Connections will be facilitated through the introduction of north/south links between Dunboyne Town Centre and the Dunboyne North lands through the revitalisation of the Old Navan Road, provision of new pedestrian and cycle routes and the in the form of a Linear Park along the Tolka River creating a new amenity for the area.



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Zoning Objectives A1 - Existing Residential A2 - New Residential B1 - Commercial Town or Village Centre C1 - Mixed Use E1/E3 - Strategic Employment Zones (High Technology Uses)/ Warehousing Distribution E2 - General Enterprise and Employment E2/E3 - General Enterprise and Employment/ Warehousing and Distribution E3 - Warehousing and Distribution F1 - Open Space G1 - Community Infrastructure RA - Rural Area Settlement Boundary

LEGEND

Fingal County Council - Administrative Area Masterplan Boundary

> A2 Phasing - Residential land not available for development until post 2027

Strategic Employment Site
Transport - Indicative Road Route

Future Gateway Building

- Existing Local Road
- Existing Pedestrian / Cycle Route
- Existing Road Upgrade
- --- Proposed Primary Road
- --- Proposed Secondary Road
- --- Proposed Pedestrian / Cycle Route
- --- Principle Pedestrian / Cycle Link between Train Station and Old Navan Road



4.0 LANDSCAPE STRATEGY

4.1 Landscape Masterplan

This landscape strategy for the Dunboyne North Masterplan is intended to guide future development proposals for the lands. The vision for the landscape sets out core elements and approaches that will remain consistent, over the various phases, subject to further detailed design as development proposals are brought forward. The landscape measures identified will be implemented in tandem with development as each of the phases are delivered. The core elements of the landscape strategy are:

- · Retention of existing landscape framework where possible
- · Replacement planting for trees and hedgerows removed to facilitate development
- Integration of SUDS, habitat and public open space
- · Continuity, permeability, pedestrian and cycle movement
- Consistent overall landscape character

The landscape strategy maximises the opportunities presented by the Tolka Valley as a movement, visual and recreational amenity asset, and will maintain traditional field boundaries where possible to preserve that character and existing biodiversity linkages across the lands. The more formal open space areas of active and passive amenity will enhance these existing features and create a soft boundary between the urban and rural landscape.

There are a number of landscape typologies included within the Masterplan area. These landscape typologies respond to the context and will contribute to provide a rich and varied sequence of amenity spaces throughout the masterplan. The character of the network of green 'spines' and pocket parks throughout the Masterplan area is dictated by the landscape typology of that area. The typologies can be categorized as follows:

- Neighbourhood / Mixed Use Centre
- Residential
- Commercial Office / Science and Technology Campus
- Public Parks (including the Linear Park)

The principal element of the landscape strategy is utilisation of the River Tolka as a linear park to facilitate movement, recreation, amenity and to protect and maintain the riparian zone. The linear park will be integrated with future development of the entire corridor area and based on the principles of the green infrastructure guidance as contained in the RSES 2019-2031.

The Tolka River corridor is a sanctuary for biodiversity and sustains an ecological network between Natura 2000 sites and other protected areas of national and international importance. This linear park will primarily occupy the eastern boundary of the Masterplan area and will lead towards the active recreational areas at the southern boundary, linking the lands to Dunboyne, Clonee and Dublin City.

Aligning movement routes with existing field boundaries will integrate the development with the landscape. The existing trees, hedgerows and vegetation will be protected where feasible and supplemented as needed to provide cohesive green linkages and biodiversity corridors across the lands.

In the interest of environmental protection native species of plants and vegetation will be provided in the plan area while care will be taken to prevent the spread of invasive plant species.



Conceptual visualisation showing character of linear park



4.0 LANDSCAPE STRATEGY

4.2 Green Links & Public Realm

The landscape strategy for Dunboyne North aims to retain the existing landscape framework, utilise the River Tolka corridor and integrate a movement strategy that will provide enhanced cycle ways and pedestrian routes throughout the Masterplan lands.

The public open spaces within the site will correspond to the location of the existing hedgerows and tree-lines. This will protect and integrate the scheme with its context, contributing to the overall green network.

Pedestrian and cycle access points are located to avoid the removal of any mature trees. The open space is proposed to be largely soft landscaped with a network of paths creating connectivity both within the scheme and with the Linear Park through to the village of Dunboyne.

The following landscaping objectives have informed the landscape design process:

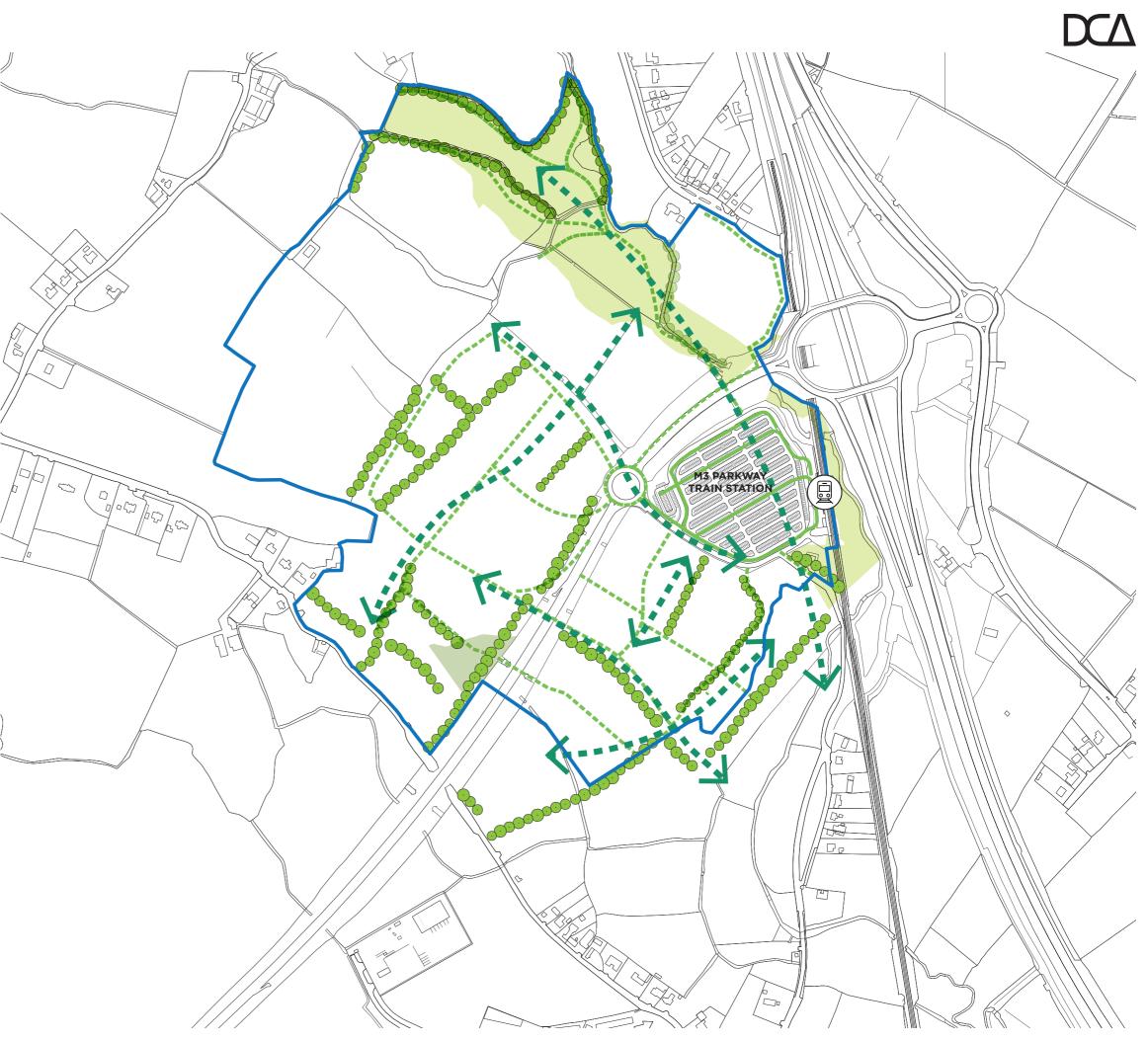
- Maximum retention of mature trees of good quality and ecological value within these hedgerows.
- Creating a green network for the proposed site, which incorporates existing hedgerows as integral elements and links to existing and future development in the vicinity.
- Providing public open space of good quality and variety, in the form of both, active and passive open space.

——— Masterplan Boundary

linear park

∢ − − **>** movement desire lines

---- pedestrian links



LANDSCAPE STRATEGY 4.0

4.3 Landscape Management Plan - Post Completion

The timeframe for landscape, public open space and green infrastructure requires a vision that is about process, growth and maturity as much as instant impact. The proposed landscape strategy, therefore, catalyses the landscape structure from the earliest enabling phases, making use of existing green infrastructure in the form of retained, protected and enhanced field boundaries and hedgerows. The existing landscape structure and spatial framework is proposed as the first stage, upon which new landscape structure is proposed to be attached over subsequent phases, some of which may mature in advance of built form. The framework or structure, existing and proposed, is intended to harness ecology and habitat as a sustainable drainage system, all connected to the Linear Park.

Early planning and implementation of planting regimes is proposed to create a strong backdrop for development. The inherent features and characteristics of the site will set certain spatial parameters, however, assumptions about existing features such as hedgerows and water courses shall be based on meticulous site inspection and appraisal in advance of each phase of development.

The landscape framework will impart a cohesive and reinforcing character, distinctive and appropriate to the Masterplan lands and be delivered in tandem with development as successive phases are progressed. These landscape elements may include any of the following:

- Neighbourhood park including the linear park
- Pocket park
- Greenway including pedestrian and cycle movement
- Green-roof
- Streetscape
- Home-zone
- Courtyard
- Car park

The landscape framework will also function as a 'design-led' sustainable urban drainage system (SUDS) which will be informed in detail by site specific flood risk assessments for individual development proposals.

The landscape framework is imaginative and responsive to its context but as a prerequisite, it is also deliverable, sustainable, resilient and cost effective. Landscape Management

The proposals for landscape and open space aim to exploit synergies between, for example, sustainable drainage and new habitat creation (the use of swales), better shelter and increased biodiversity (planting native tree species), flood management and protection of the river itself from pollutants, and finally, improved micro-climate and retention of the character of the site. These attributes shall be at the core of the management of the landscape framework.

As each phase of the landscape framework is delivered it will be designed to taking-in-charge standards and/or as agreed with the local authority, to facilitate future management and maintenance and to allow the local authority to take-in-charge all or any portion of the public open space either immediately after development or at some point in the future.

Integration of existing hedgerows, drains, ditches and habitat to facilitate sustainable urban drainage will require a low energy but seasonal and well programmed approach to landscape maintenance. Detailed proposals for pocket parks, which will form extensions of the framework within particular phases of development, will take into account the requirements for low and/or infrequent maintenance.

Specialist facilities such as play areas and play equipment or trim-trail equipment, and the equipment and specification for lighting of public open space, as well as seating and street furniture, shall be agreed with the local authority in advance. Boundaries, including the requirement or not, to enclose public open space will also be agreed in advance. Enclosure shall be proposed for the Linear Park but not for smaller parks such as pocket parks. All areas shall be universally accessible and capable of being accessed by maintenance vehicles and machinery.

Special consideration shall be given to the Linear Park in relation to the River Tolka, with key entrances, focal points, signage, interpretation panels and connections back to Dunboyne Town Centre and the train station. These open spaces shall be managed for flooding and shall be considered in the context of the overall strategy for the river, within the Masterplan lands, but also as it continues downstream, in consultation with the OPW and other bodies as appropriate.

Landscape Materials

Robust and commonly available materials shall be specified throughout, but with exceptions at key areas such as the Linear Park where bespoke design will be exploited as required to create a unique sense of place, in keeping with the importance of the parks and the river itself.

Throughout the Masterplan area permeable hard landscape surfaces will be specified, where possible, and in conjunction with taking-in-charge standards.

Planting will be, where possible, native with a strong emphasis on robust, low maintenance tree species which will provide long-term landscape character, such as oak, holly, hawthorn, Scots pine, alder, willow, hazel, blackthorn, guilder rose and birch. Plant associations and mixes will be based on selected appropriate habitats as published in the Heritage Council's 'A Guide to Habitats in Ireland'.

As phases of development are proposed, existing trees shall be surveyed in accordance with BS5837 (2012). BS5837 (2012) calls for a rigorous appraisal of existing trees and provides the design team with a very useful set of categories by which to analyse the trees in terms of their medium to longterm potential in addition to their sensitivity to proposed development. The surveys shall inform the detail of the proposals for the landscape framework as it applies to the given phase of development. A review of ash trees on the masterplan lands shall be undertaken in light of the spread of ash dieback. Ash shall not be specified as replacement planting.

Topsoil shall be stripped, stored and reused where required in accordance with BS3882 and other relevant standards and guidance including the National Parks and Wildlife Service publication 'Invasive Species in Ireland'.









Selection of planting showing character for the variety of landscape typologies

Selection of high quality materials appropriate for park and village centre locations

5.1 Employment Lands

The development of these lands will provide for a range of uses consistent with the objective of creating a modern and contemporary employment and business park as part of the Dunboyne North masterplan.

The development of this strategic development area for these uses will promote economic growth, investment and prosperity in the region by creating significant employment opportunities and contributing to the stock of large-scale, high-end office space. Building on synergies with nearby employment nodes, the site's location is likely to attract ICT and pharmaceutical companies, with potential for the establishment of an educational campus.

Located conveniently off the M3, within a few minutes' walk from the Parkway Train Station and 1.7km from Dunboyne Town Centre, the future development of these employment lands will be underpinned by integration of land use and transportation to create a sustainable community proximate to new residential development that counteracts historic patterns of outward commuting.

Carefully considered design will enhance connectivity to the M3 multi-modal transport interchange and promote active travel modes supported by improvements to the surrounding network of pedestrian, cycle and road infrastructure.

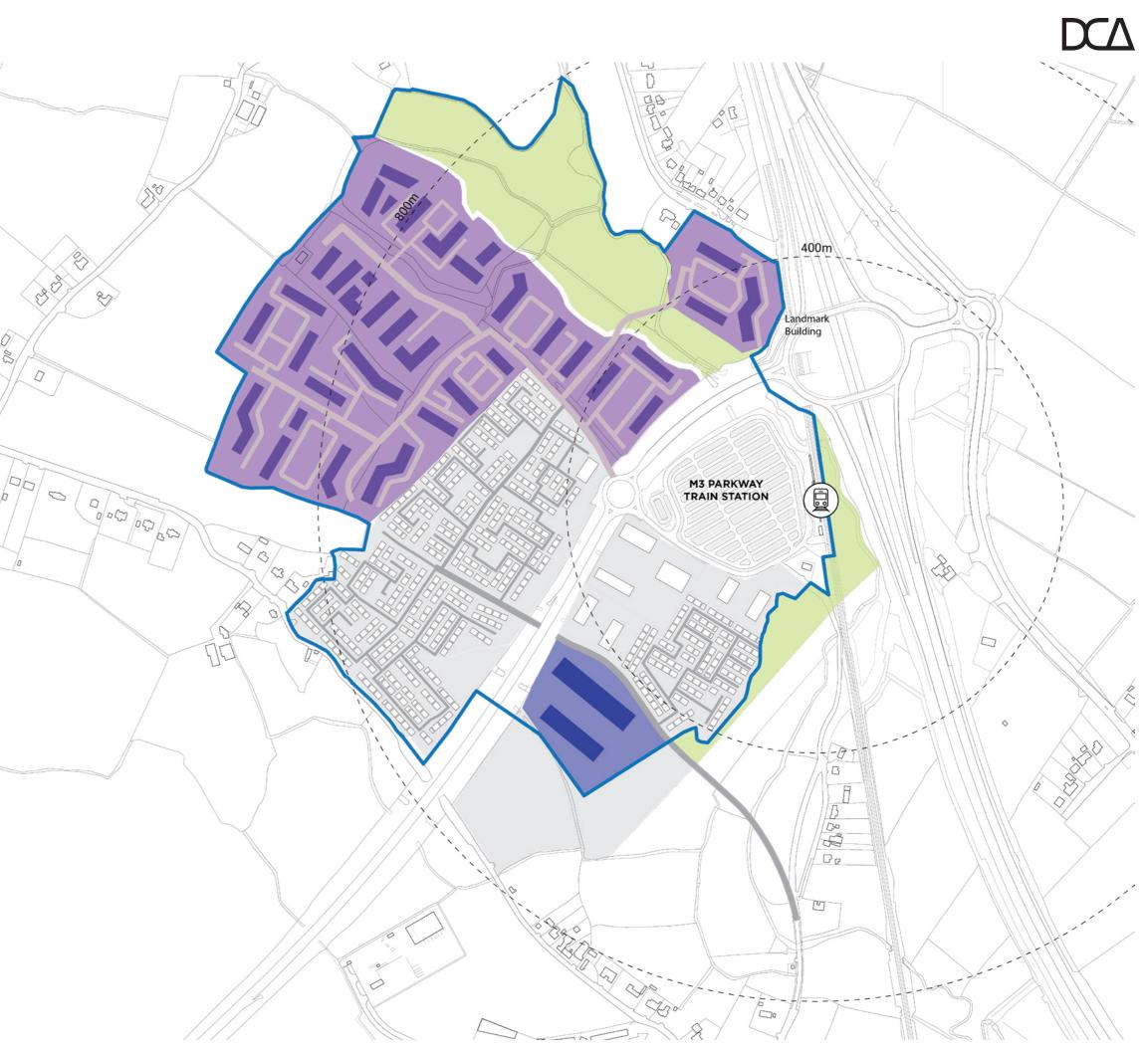
Creation of high-quality public open space adjacent to the River Tolka will provide an important amenity for nearby residents and the local workforce.

The location of the Masterplan lands presents an opportunity to provide a landmark at the junction of the M3 and R157, denoting its significance and marking the entry to the site.

—— Masterplan Boundary

E1/E3 - Strategic Employment Zones (High Technology Uses) / Warehousing & Distribution

E3 - Warehousing & Distribution



5.1 Employment Lands

Design Concept

The design approach is to integrate simple elegant contemporary buildings clustered around central landscaped areas into a natural environment, making a significant contribution to place-making for this new live-work community.

The scale and layout of buildings will be carefully considered to respond to the existing landscape character and complement the newly landscaped environment. The buildings will generally range in height from 3 to 4 storeys, depending on their context. Adjacent to the M3 motorway there is an opportunity to provide a landmark building that may incorporate greater height and an enhanced architectural response to distinguish this prominent location within the Masterplan site.

All development proposals will be subject to detailed design that is underpinned by the County Development Plan standards and principles of Transit Orientated Development to encourage use of sustainable transport options and promote active travel modes. Secure bicycle storage, electric car charging points and spaces for shared car schemes will be provided throughout.

Connectivity and permeability between the residential and employment uses within the Dunboyne North lands will be an integral element of the design, as well as the provision of new cycle and pedestrian paths to the Parkway Train Station and Dunboyne Town Centre.

Integration with the significant amenity areas along the Tolka River and creation of new Linear Parklands, with buildings sited to retain existing hedgerows and trees where feasible, complemented by a comprehensive landscape strategy. The construction of a bridge across the River Tolka will further enhance links and enrich the amenity value of this recreational asset.



Artist impression of the enterprise park

5.2 Neighbourhood Centre

The neighbourhood centre will provide for residential and business uses consistent with the mixed-use zoning objective for this site. It is intended that the development will deliver ready access to supporting facilities and social infrastructure at an appropriate scale to serve the new live-work community in Dunboyne North, comprising a range of retail, commercial, residential and complementary uses.

The proximity of the site to the surrounding residential areas and employment hub, as well as the M3 Parkway Train Station will complement the surrounding uses and secure the objective of creating a vibrant and sustainable live-work community.

The centre will provide a mix of retail and commercial units including anchor retail unit, together with non-residential supporting uses such as smaller shops, cafe, local services, office space or community facilities, creating additional employment generating opportunities within the Dunboyne North lands and providing important services for the local population.

Development will be designed to prioritise pedestrian movement within the site benefitting from the enhanced pedestrian and cycling linkages to this location. This approach is aligned with the principle of sustainability that is integral to the masterplan and will also create a more active streetscape that improves passive surveillance along this key thoroughfare to the Parkway Train Station.

Retail services will be of a scale appropriate to serve future need at this location. A Retail Impact Assessment may be required in relation to any future planning application for retail development in this mixed use zone.



Example of a neighbourhood centre



5.3 Housing





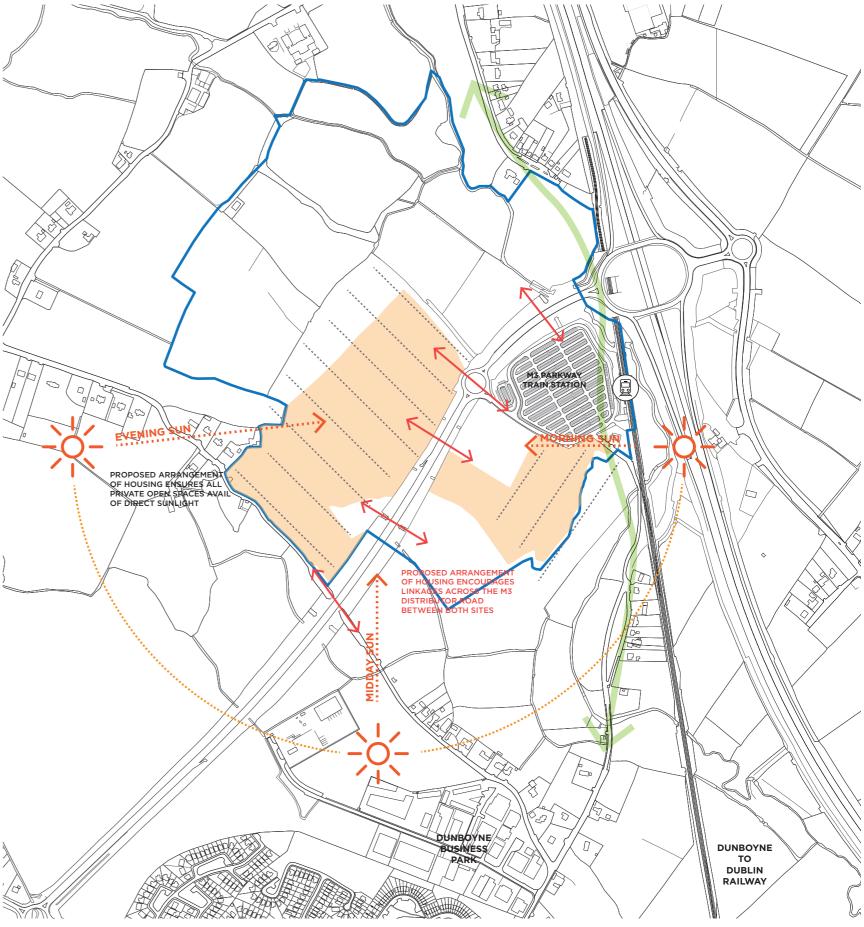


The masterplan for the residential area of Dunboyne North seeks to create a thriving 'live work' community with active and friendly streetscapes and with strong linkages to the adjoining employment lands and transport hub. The aim is to produce an exemplary environment; a place that is desirable to live and one which balances usable private space within an overall structure of high-quality public spaces. The community will be prioritised, with pedestrian priority streets and pocket parks provided throughout.

This will be a fledgling neighbourhood with a varied social mix and with significant employment opportunities and sustainable transport options on the doorstep - the ideal location in which to build a real sense of community and facilitate a modal shift towards more sustainable forms of transport.

This masterplan envisions a community that can adapt and grow with the changing needs of its residents and encourages innovative design solutions to the provision of density in a mixture of typologies and bedroom sizes whilst providing highquality living environments, a strong sense of place and liveable pedestrian priority streets. New homes shall also seek to make provision for potential home working opportunities, thereby further enhancing the 'live work' concept for the lands.

Flexibility in the application of the development management standards will be facilitated in instances where high quality design and layout has been demonstrated and subject to the maintenance of privacy and protection of residential amenities. In particular, building height and car parking will be based on performance criteria that seek to achieve well-designed high-quality outcomes in order to achieve targeted growth.



Residential Concept

5.3 Housing

Key Built Form Objectives

- Lands in proximity to Dunboyne North Railway Station shall seek to provide strong interconnectivity to adjoining employment, amenity, recreation, and transportation zones. Indicative density appropriate to the site context shall be provided proximate to the railway station of 45-50 units per hectare, including both residential and local centre zoned lands. Density for the remainder of the development will reduce with increased distance from the train station.
- Reduced parking provision and high-quality legible pedestrian and cycle linkages to adjoining transportation and employment lands to foster a modal shift towards more sustainable forms of transport.
- Ensure that a suitable variety and mix of dwelling types and sizes is provided in the development to meet different needs, having regard to demographic and social changes and to diversify existing housing stock in the area.
- Encourage an urban design-led approach including innovative design solutions and positive urban placemaking as a central component in creating and sustaining vibrant communities.
- Retain good quality trees and hedgerows and arrangement of new housing to overlook open spaces to ensure passive surveillance of amenity areas and to discourage antisocial behaviour.
- Ensure appropriate consideration of the creation of streets with a strong sense of enclosure, that provide opportunities for children to play coupled with a requirement to cater for bikes, bins, and cars.
- Flexibility in the application of development standards with the consideration of overall performance-based criteria and provision of high-quality design outcomes, subject to maintenance of privacy and protection of residential amenities.



Key gateways / vistas to be defined by wayfinding marker buildings



Linear park through the scheme facilitates a safe and enjoyable experience for pedestrian and cyclists



Clusters fostering community

Community is prioritised, with pedestrian priority streets and pocket parks provided throughout.





PHASING & IMPLEMENTATION 6.0

Phase 1A + 1B + 1C 6.1

Indicative phasing provision provides a framework for coordination of planning applications and is not intended to be restrictive but rather responsive to the evolving planning policy context and development requirements of the lands. It provides for significant employment generation, 500 units initially and a neighbourhood centre. It also provides for a strong connection link back to Dunboyne Town Centre in the first phase together with junction upgrade works. Public open space within the bounds of the Masterplan lands will be provided in tandem with the individual development proposals and in accordance with ownership boundaries that will determine timing of delivery and implementation. Employment uses can be considered by the Planning Authority outside the phasing arrangement at any time if a promoter expresses interest and commitment on the employment lands.

Phase 1A

- Strategic Employment Site E1/E3 zone .
- Residential Use Circa 500 residential units on A2 and C1 zoned lands
- Anchor retail and non-residential supporting uses such as café, local services, office space, community facilities, C1 zone.
- Open Space ٠
- Education Use ٠

Phase 1B

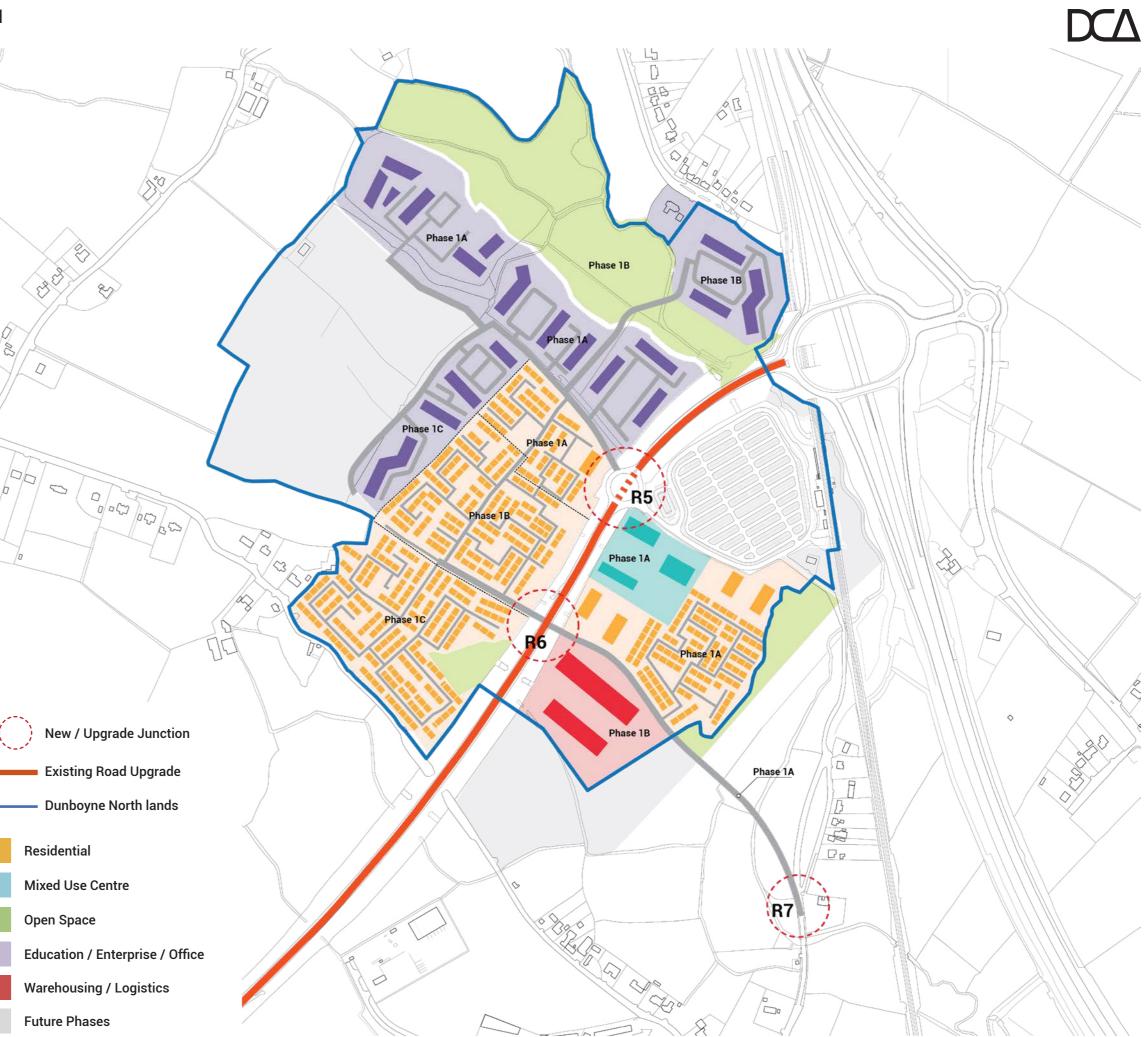
- Residential Use Further residential • development in 1B to occur in tandem with greater modal shift towards active travel/public transport. Circa 300-500 residential units are likely to be accomodated on these lands
- Warehousing/logistics E3 zone .
- Strategic Employment site E1/E3 zone
- Open Space

Infrastructure Requirements for Phase 1A and 1B:

The following measures contained in the Dunboyne and Environs Transport Assessment:

- R5 Northern Signalised Dunboyne North . Junction.
- R6 Southern Signalised Dunboyne North . Junction
- R7 Old Navan Road Link Extension to R157.
- A5 Dunboyne North Pedestrian/Cycle Network • to be delivered within each phase.
- A6 Old Navan Road Pedestrian/Cycle Link to be delivered within Phase 1 A or alternatively in accordance with the Dunboyne Transportation Study.

The required junction upgrades and new road link



6.0 PHASING & IMPLEMENTATION

6.1 Phase 1A + 1B + 1C

(identified as measures R5, R6 and R7 in the Aecom Transportation Study) will be subject to detailed design in consultation with Meath County Council Transport Section.

The proposed pedestrian and cycle routes identified in Section 3.4 of this Masterplan shall be delivered in a sequential manner as individual development proposals are advanced.

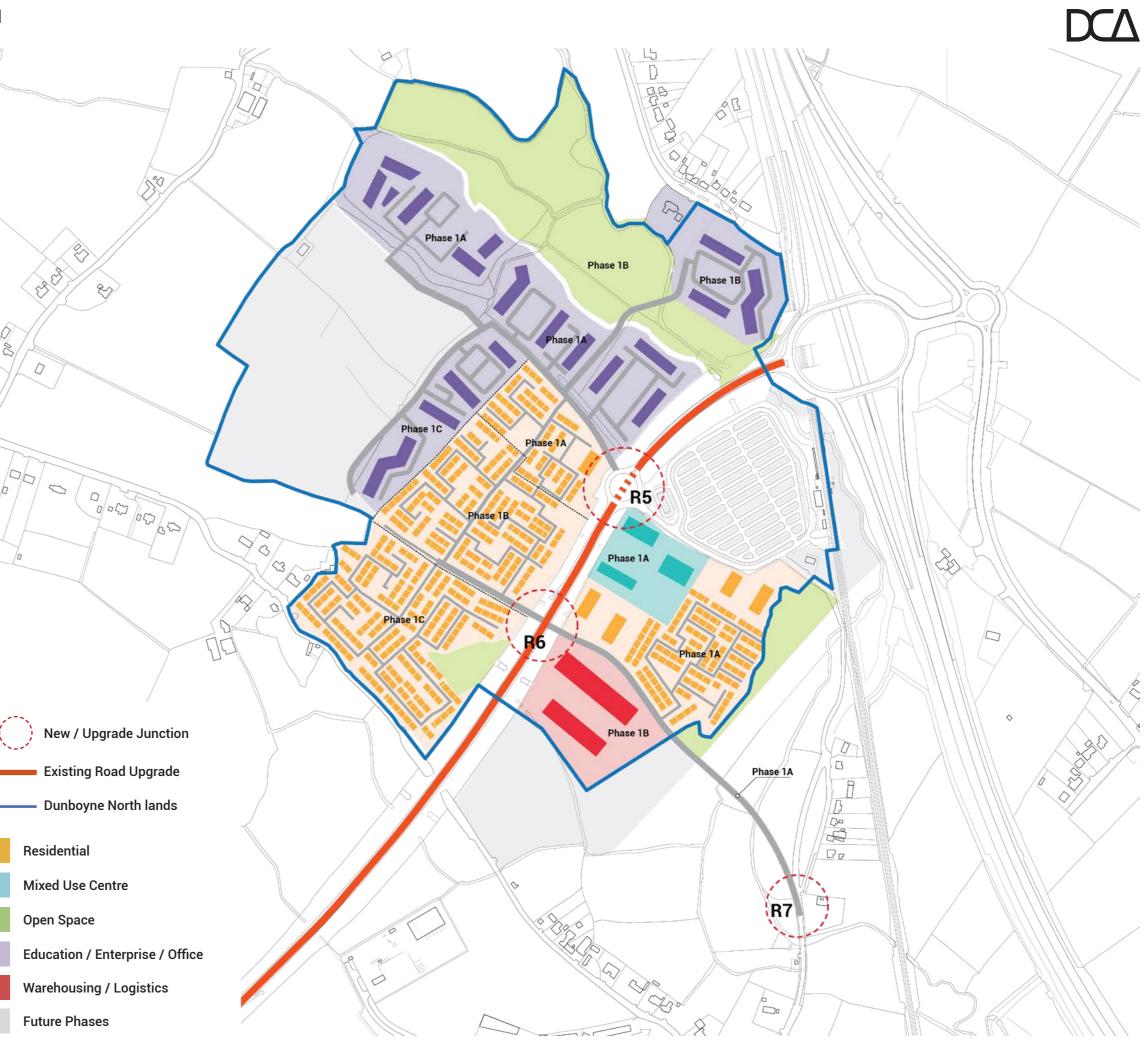
Phase 1C

- Residential Use Further residential development in 1C to occur in tandem with modal shift towards active travel/public transport
- Strategic Employment site -E1/E3 zone.
- Open space provision.

Infrastructure Requirements for Phase 1C:

- Pedestrian and cycle routes in accordance with section 3.4 of the Master Plan.
- A5 Dunboyne North Pedestrian/Cycle Network to be delivered within each phase.

This is an indicative phasing plan. Each phase of development will respond to the national, regional and local planning policies in force at the time of making individual planning applications.



PHASING & IMPLEMENTATION 6.0

6.2 **Indicative Future Phase 2**

Future phases of development within the Dunboyne North masterplan shall respond to amendments to the national, regional and local planning policies which will ensure the potential of the site is realised and have regard to the following:

- · The development of an appropriate quantum of employment generating uses that ensures the overarching objective of securing a sustainable live-work community is achieved, reducing car dependence and countering traditional commuting patterns.
- · The delivery of required infrastructural improvements to the surrounding road network, including planned pedestrian and cycling linkages aligned with the Aecom Transportation Study at Dunboyne and Environs. These local improvements will complement investment in the wider network of planned greenway routes, including between Blanchardstown and Dunboyne via Clonee.

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- Further updates to modelling and analysis of the capacity of the surrounding road and public transport network, influenced by the implementation of transit oriented development principles within Phase 1 which will provide for reduced levels of car dependence and encourage active modes of travel.
- Delivery of planned improvements to the infrastructure and carrying capacity of the rail service which will directly improve accessibility to the Dunboyne North lands. In the short term, through the purchase of additional fleet which will relieve pressure on existing services. In the longer term, upgrades to nearby rail infrastructure through the DART Expansion Programme in accordance with the National Development Plan 2027, including electrification and re-signalling along the Maynooth and M3 Parkway corridors which will significantly improve the frequency of future rail services at this location. This expansion to the rail network will be further enhanced by plans to improve interchange opportunities with Metrolink and Dublin LUAS services, and the Bus Connects Programme.
- Open Space zoned lands in the south of Masterplan site to be reviewed in conjunction with future phases of Masterplan and future County Development Plan review. These lands are considered to have development potential based on updated CFRAM mapping (2019) which indicates significantly reduced flood extent in this part of the Masterplan area now minimally affected by Flood Zone B.

