4.8.6 Flood Risk Management

Accompanying this Local Area Plan is a flood risk assessment (see Appendix (1), which includes a number of measures necessary to ensure flood risk is incorporated into the planning of this area.

The River Tolka runs to the north of the plan area. This is one of Dublin's three main rivers. (the other main rivers are the Liffey and the Dodder). The Tolka River rises east of Dunshaughlin in Co Meath and bypasses Dunboyne joining up with the Castle Stream Tributary. From Clonee where it is joined by the Clonee Stream, it flows into County Dublin. The river then continues through Damastown, and Mulhuddart, Blanchardstown and Ashtown (south of Finglas) and then into the north Dublin suburban districts of Glasnevin and Drumcondra were it comes closest to the Royal Canal near Binn's Bridge. At the southern end of Tolka Park it forms the border between Ballybough and Fairview, before entering Dublin bay between East Wall and Clontarf. The Tolka River has many tributaries the first major one being the Castle Stream at Dunboyne. There are at least fourteen infalls within Dublin City boundaries. The Wad River system, coming from north Ballymun, interconnects with the Tolka via a link with the Claremont Stream and with the Wad River Diversion, which flows along the Ballymun Road and Glasnevin Avenue.

The River Tolka has a history of flooding after heavy rainfall and has been well documented after major flood events in 1954. Severe flooding from the Tolka River and its tributaries occurred in the Dublin City, Meath and Fingal areas in November 2000 and November 2002. In 2001 Dublin City Council commissioned the Greater Dublin Strategic Drainage Study (GDSDS) to look at the strategic drainage requirement for the Greater Dublin area. A full study of the Tolka was not included in the GDSDS, however in view of the November 2000 flood the OPW requested that it be included. The River Tolka is the second largest river entering Dublin City in terms of its length and catchment area , after the Liffey. It rises in County Meath and serves a catchment which is roughly divided in three parts between a generally rural area in County Meath, a developing area in Fingal and a substantially developed area in Dublin City Council.

The river has a relatively flat gradient and is characterised by small summer flows and a tendency to occasional extreme floods generally in response to particular hydrogical conditions. During the study the Tolka suffered a major flood event in November 2002., this resulted in peak river flows in Dublin City were 10% in excess of those estimated in 1954. Analysis of this event showed that the classic conditions for a severe flood, namely winter conditions with heavy rain in the previous days and weeks leading to saturated conditions followed by sustained severe rainstorm of around 48 hours duration. The Tolka Flooding Study identifies that substantial areas of urban development in the study area are at risk of repeat flooding from the River Tolka. The separate Dublin City Coastal Flood Risk Assessment (DCCFRA) study examines the issue of tidal flooding of the coastal areas.

The outcome of the study was to outline the works required to reduce the risk of flooding in the study area to less than 1% annually. These works comprise the River Flood Alleviation Scheme which include preliminary works currently being implemented, It was estimated that the cost of implementing the proposed scheme was circa. €32 million, with recommendations that a budget for maintenance and monitoring be provided to the order of €100K per annum.

In terms of flooding the river floods infrequently but with occasional severity. It is not typically flashy like the Dodder but builds up over a period. There have been a number of occurrences of flooding over the years. For a summary of historic flood events please refer to www.floodmaps.ie (see appendix 1 for summary)

4.8.7 Utilities

The Ashtown – Pelletstown Area is currently serviced by the necessary electrically, gas services and telecommunication infrastructure and can support the expected increase in population and intensification of economic activity. It is expected that upgrading as and when required of each network will take place at a local level to meet growth in demand and that these upgrades will be delivered by individual service providers.

Telecoms & Broadband

There are a number of service providers offering broadband and integrated telecoms services in the area. Telecommunications infrastructure has been extended into the Pelletstown development lands, including the construction of a new Eircom Remote Services Unit (RSU).

New development in the LAP area shall accommodate the provision of a universal open access ducting network to support telecommunications, broadband and digital services. All arrangements for exchange buildings, communications, towers containing antenna, dishes, etc shall be agreed in advance in order to ensure that their location, design and access thereto is compatible with the design strategy for schemes and the area.

Gas Supply

An Bord Gais have completed the infrastructure works required to service the Pelletstown Lands, including a new crossing under the Maynooth Railway line and the Royal Canal. The trunk gas infrastructure has been constructed.

Where Bord Gais identifies a need to upgrade the existing network the distribution pipe work shall be routed in line with the main infrastructure in the paved footpath areas or roadways dependent on the pressure of the mains.

Waste Management

Waste Management is concerned with the generation, collection and disposal of waste. The Waste Management Act 1996 defines waste as 'any substance or object which the holder discards or intends or is required to discard.' Delivery of the objectives of the DCC Waste Management Plan will be implemented through the development management process by accommodating recycling facilities for new residential and commercial developments.

Electricity Supply

The electricity supply network has been extended into the Pelletstown lands and this network has been designed by the ESB to service the entire development lands.



4.8.8 Construction Management Plans

Developer(s) at application stage shall be required to submit a construction programme setting out a planned programme for the management/ recovery/disposal of construction/demolition waste material generated at the site during the excavation and construction phases of development, this should be in accordance with the relevant national waste management legislation, at planning application stage. It is an objective of this LAP that developers shall ensure that all waste is removed from the plan lands by approved waste disposal contractors to approved waste disposal facilities. In addition, it is an objective of this plan that developers shall take adequate measures to minimise the impacts of traffic, noise and dust during construction phases.





Infrastructure Policies

IW1 To actively seek the funding and delivery of key infrastructure including water supply and waste water for the Dublin Region to enable development in the Ashtown – Pelletstown area.

IW2 To ensure that development is permitted in tandem with available water supply, waste water treatment and network capacity. To manage and phase development so that new schemes are permitted only where adequate capacity or resources exist or will become available within the life of a planning permission.

IW3 To require that all large development proposals include water conservation and demand management measures.

IW4 To protect existing infrastructure by ensuring through consultation with Dublin City Council, that buildings and structures are designed and constructed so that they do not compromise the structural integrity of trunk watermains drainage pipes, gas mains, overhead cables, and other services in the area.

IW5 To seek to improve water quality and meet the objectives of the Eastern River Basin District Management Plan by ensuring the separation of foul and surface water effluent through the provision of separate sewage networks in any new permission, and by ensuring the implementation of a stormwater management system in the detailed design of the plan lands, following the principles of Sustainable Urban Drainage Systems (SuDS).

IW6 To encourage provision of suitably high quality strategic telecommunications including fibre optic, broadband links and utilities (including gas and electricity) infrastructure within the area of the local area plan.

Infrastructure Objectives

IWO1 To promote the achievement of good ecological status, good ecological potential and good chemical status for the River Tolka by 2027, in accordance with the Water Framework Directive.

IWO2 To implement the programme of measures (POM) for the River Tolka set out in the Eastern River Basin Management Plan 2009 – 2015.

IWO3 To support the principles of good waste management, and to provide for local recycling facilities. Any large retail site must provide a glass recycling facility.

IWO4 To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and Appendix 1 of this plan. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks.

IWO5 All planning applications shall be required to submit a surface water drainage plan, following the principles of Sustainable Urban Drainage Systems (SuDS) which will include proposals for the management of surface water within sites, protecting the water quality of the River Tolka.

IWO6 A construction management plan shall be submitted for all large developments setting out a planned programme for the management, recovery, disposal of construction and demolition waste material generated at the site during the excavation and construction phases of development, in accordance with the relevant national waste management legislation. Developers shall ensure that all waste is removed from the plan lands by approved waste disposal contractors to approved waste disposal facilities. In addition, it is an objective of this plan that developers shall take adequate measures to minimise the impacts of traffic, noise and dust during construction phases.

IWO7 Any works for infrastructure development adjacent to the Royal Canal pNHA, in particular works in pursuit of the delivery of Objectives MAO3, MAO6 and LUS02, shall require effective mitigation measures, agreed with Waterways Ireland and agreed with the planning authority through the appropriate planning and environmental assessment process for each project, to minimise the potential for significant adverse short term and long term impacts on the canal, its water, habitats and amenity value.

IW08 - To ensure the protection of surface and ground water quality in the plan area and surrounding areas in the construction of enhanced infrastructural requirements, and the protection of protected habitats and species including designated national and international conservation sites in implementing the plan.

IW09 – The recommendations of the Eastern Catchment Flood Risk Assessment and Management Plan (CFRAM) study shall be incorporated into any future development of the area, upon its adoption





4.9 Green Infrastructure & Biodiversity

4.9.1 Introduction

Green infrastructure incorporates concepts of multi-functionality, conservation of ecosystems, establishing new linkages and improving networks, and enhancing biodiversity. These can all contribute to society through improved sustainability and enhancement of living environment. Dublin City Council has adopted the following definition for green infrastructure:

'a network of connected, high quality, multifunctional open spaces and corridors and the links in between that provide environmental services and multiple benefits for people and wildlife. It is also used to describe a broad range of design techniques and materials that have a sustainable character and have a beneficial environmental impact such as solar panels, wind turbines etc'.

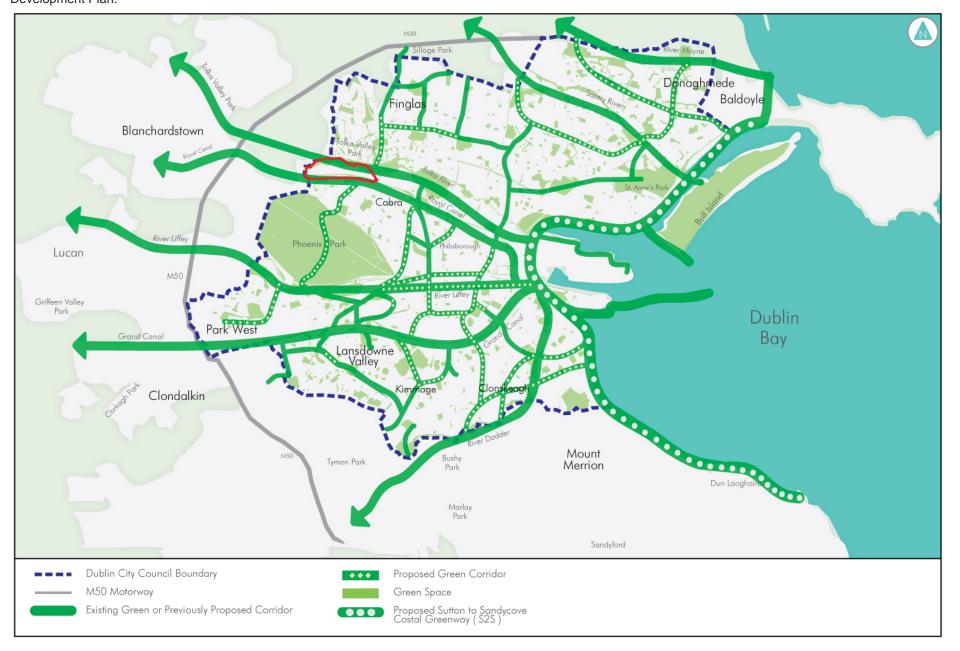
Recent government guidelines (June 2013) issued for local area plans emphasise the need for the integration of environmental considerations such as climate change, biodiversity and green infrastructure into the local planning process in order to meet future environmental challenges. To this end, the core strategy of the Dublin City Development Plan 2011 – 2017 sets policy for the creation of a compact, quality, green, well-connected city which generates a dynamic, mixed-use environment for living, working and cultural interaction. The plan also includes specific objectives relating to greening the city, biodiversity, amenity, sustainable transport and water treatment. The city's green infrastructure includes public parks, recreation areas, street trees and emerging greening technologies such as green roofs, green walls and sustainable urban drainage systems.

The City Council actively promotes the concept of a Green Infrastructure (or 'GI') strategy comprising a spatial strategic network to be delivered through the development management process and local area plans, and a city-wide strategic green network has been mapped. Map 4.16 illustrates strategic green corridors along both the southern and northern boundaries of the plan area – ie the Royal Canal to the south and the Tolka River to the north, and this plan presents an opportunity to plan for improved links between these strategic green assets.

Policies of the city development plan relating to green infrastructure place emphasis on the encouragement of new linear parks and connections (including both pedestrian and cycle access), enhancing biodiversity, and co-ordinating with flood management requirements. Objectives focus on specific components of the city-wide network. More locally, there are opportunities to enhance connectivity between strategic routes and also to extend to nearby green spaces/amenities and the phoenix park.

Map 4.16 Strategic Green Infrastructure for the city as set out in the City Development Plan.

Integrated with the above approach is the opportunity to achieve a rich and varied biodiversity – both by protecting key assets and by encouraging a variety of habitats that attract varied flora and fauna. These can be interlinked by green corridors on the Green Infrastructure network and hence contribute to the visual attractiveness of the area. Baseline work has been carried out to establish the extent of different habitats and to determine species (including protected species) present, and this will inform policies and objectives.







4.9.2 Developing a GI Strategy - Key Inputs.

An effective Green Infrastructure strategy demands that attention is paid to the sufficiency and suitability of both green spaces and links for achieving multiple objectives. How greenways or green spaces are experienced by users is also key.

The main aim of the green infrastructure strategy for the plan area is to:

- (i) develop a linked green network of multi-functional open spaces and green corridors/links, working with existing amenities, established routes and opportunities for visual variety and enhanced biodiversity.
- (ii) ensure the incorporation of a broad range of existing and proposed sustainable design techniques that have beneficial environmental impacts (section 4.11 of this plan, which addresses 'environmental sustainability and sustainable design', is relevant here)

The proposed network will be mapped out not only within the plan area but also allowing for wider connectivity as part of the city-wide network area and wider environs extending into Fingal. It is the intended to capitalise on the existing strategic GI assets by seeking that, where feasible, future developments of remaining vacant sites within the plan lands will reinforce the benefits of existing GI features in the area. This network must be both compatible and consistent with both structuring principles and urban design objectives of this plan.

The City Development Plan contains a number of site specific objectives and principles to add to the city's green network that are directly related to the plan area.

Relevant Policies and Objectives of the Dublin City Development Plan 2011 – 2017.

- To promote the development of the citys urban forms so that they positively contribute to the citys neighbourhoods, public spaces and natural environment (Policy SC29)
- To promote the development of architecture and urban design which enhances local environments and which mitigates, and is resilient to the impacts of climate change (SC32).
- To develop new cycle links includingGrand and Royal Canal Premium Routes (Objective SIO3)
- To provide a pedestrian and cycle way green link interconnecting the Royal Canal to the Grand Canal via the Phoenix Park in consultation with the Office of Public Works (Objective GCO2)

- To seek to provide pedestrian and cycling green links connecting the Royal Canal and the Tolka Valley via a route through Botanic Gardens/Prospect Cemetery and a route in the vicinity of Holy Cross College (or routes as close as practically possible) in consultation with the Office of Public Works (Objective GCO2)
- To continue to cooperate with Waterways Ireland and other agencies to develop the amenity and biodiversity of canals as set out in Dublin City Canals Framework (January 2010) and supporting 'Waterways Ireland: Interim Environment and Heritage Policy' document (GC20)

Note; some related objectives may be contained in separate chapters of this document (i.e. the above is not an exhaustive list)

Relevant Guiding Principles for Pelletstown SDRA;

• To develop a coherent spatial structure, based on a hierarchy of linked streets, public spaces, and design in keeping with the natural and other adjacent amenity areas of the Phoenix Park, the Royal Canal and Tolka Valley. The main components of this spatial structure are a tree-lined canal side boulevard linking the two village centres and providing the potential for developing a range of different experiences, including recreational uses ... a central park to provide the setting for leisure uses and community activities ... north/south linkages facilitating good access to public transport and to the amenity of Tolka Valley (SDRA principle no. 6)and ...To promote the creation of a high quality public domain by establishing a high standard of design in architecture and landscape architecture (SDRA principle no. 7)

Dublin City Canal Framework

The Dublin City Canal Framework (2010) sets out the proposals and projects for this area. It seeks canal corridor widening, habitat and landscape enhancement and integration with parks. Projects relate to fishing, improving access and interlinking communities.

Other relevant plans:

Regional Planning Guidelines for the Greater Dublin Area 2010-2022 contain strategic recommendations relating to SuDS, encouraging an integrated response to addressing flooding, and the need for sustainable water management. The guidelines also include actions for Green Infrastructure development. In summary these include;

- The need for linkages both along and between river and canal corridors.
- Development of targeted walkways and cycleways.
- Increased opportunities for ease of access to the countryside for residents, whilst supporting wildlife and biodiversity

The Fingal County Development Plan contains the following specific objective for the Royal Canal:

To prepare a coordinated brief for all Royal Canal Crossings and development adjacent to the Canal in cooperation with relevant stakeholders. The design brief will include pedestrian/cycle links.

This LAP will support and facilitate the progression of these policies and objectives.

'TURAS' project

The TURAS project is an EU-wide initiative, the acronym meaning 'Transitioning towards Urban Resilience and Sustainability'. It aims to see how resilience measures can be developed in the face of challenges to sustainability. New transition strategies at an EU wide level can help reduce the urban ecological footprint, and strategies being developed in association with University College Dublin may include re-use of derelict sites, improving biodiversity, reducing energy consumption, and reducing flood risk (see also section 4.10.5). Areas of Ashtown- Pelletstown and Dublins Docklands may be examined as case studies.



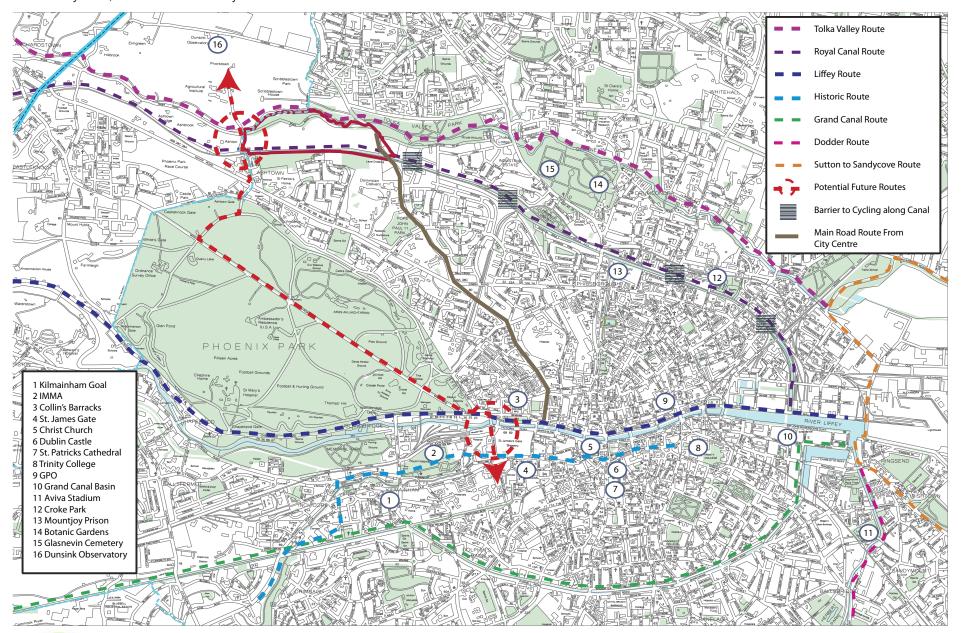


4.9.3 The LAP area context and green Infrastructure connectivity opportunities.

Drawing on strategic level material, Map 4.17 focuses on the relationship between the plan area and key green routes to the city and associated destinations. This provides a useful contextual view, distinguishing between different riverside routes, historic routes, and identifying the route of the planned coastal Sutton to Sandycove route (a dedicated cycling and walking route). In essence, this highlights the opportunity to develop an integrated network. The Royal Canal, River Tolka, and significant heritage sites are all illustrated, and close proximity to the Phoenix Park is evident.

It is clear that there is potential for improved future connections, including an opportunity to link to Dunsink Observatory - located to the northwest (in association with Fingal County Council), and also to improve links to the River Liffey and further southwards to the Grand Canal . The location of these lands, connecting at the River Tolka to the Royal Canal is advantageous, and this LAP focuses on both wider connectivity and internal green infrastructure and biodiversity.

Map 4.17- Strategic Diagram showing relationship of the LAP area to Tolka Valley Park, Phoenix Park and city centre



4.9.4 Existing Green Infrastructure at Local Level

In the Ashtown-Pelletstown plan area and its environs there are significant green infrastructure features, - both natural elements and man-made components, green linkages, habitats and biodiverse areas already in place. These include the following:

- Tolka River Valley Park multi-functional parkland of strategic significance on the citys GI network. The Tolka River forms the northern boundary of the plan area and is considered to be of county-level ecological importance. Areas around the river consist of both natural and semi-natural green spaces providing important habitats for plants and animals. Recent works by Dublin City Council improve accessibility both to and within the park.
- ii) Tolka Valley Greenway a €3 million, 4-kilometre off-road cycling route (greenway) linking Glasnevin, Finglas and Ashtown funded by the National Transport Agency and running through the Tolka River Valley Park. Fingal County Council is currently progressing policy for a greenway along the Canal running west from Ashtown and incorporating a walkway and cycleway in a landscaped setting
- iii) The Royal Canal running along the southern boundary of the plan lands and linking into the areas along the canal further west and east. This is a designated proposed Natural Heritage Area (pNHA), considered to be of National-level ecological importance and is a designated conservation area as provided for under the city development plan. Schemes built to date within the plan area have contributed towards the development of a linear park which increases the biodiversity, attractiveness and functionality of the improved towpath.
- Features of existing developed and undeveloped lands including mature hedgerows, scrub, grassland, trees and woodland. These vary in extent, quality and range of species.
- v) Existing green corridors including long established hedgerows and linear planting on undeveloped lands, within Tolka Valley Park, and along the canal.
- vi) A series of interconnected artificial attenuation ponds towards the eastern section of the plan lands and positioned just west of buildings at Royal Canal Park. These are located on undeveloped lands and contribute both towards visual amenity and biodiversity.
- vii) Swales along Pelletstown Avenue (functionally related to the abovementioned ponds). These are a visual break in the street and form an attractive backdrop for street furniture and seating.





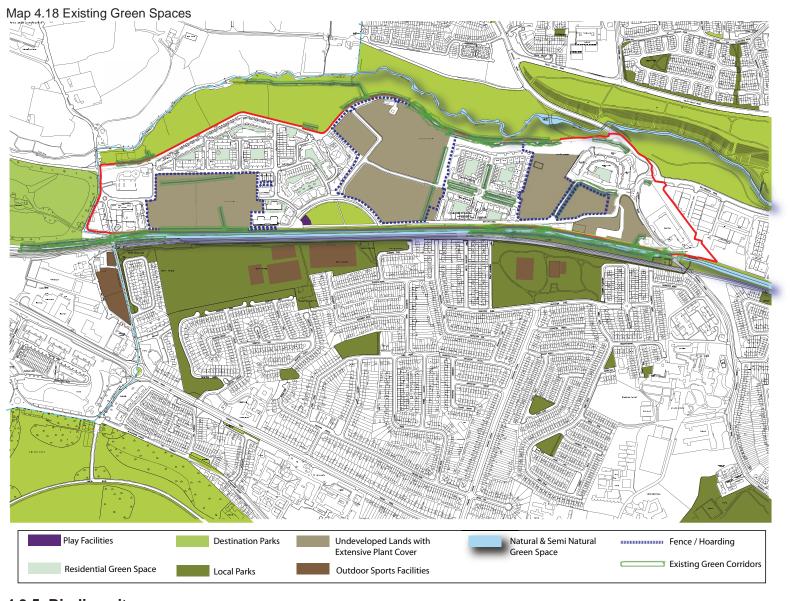
Existing Green Spaces

In relation to undeveloped lands there may be opportunities to integrate some of the above elements into new development and to provide interconnections to nearby features and green links. Map 4.18 illustrates green spaces in the LAP area, distinguishing between parks, open space associated with existing residential developments, and spaces for activities including sports facilities and locations for childrens play. Undeveloped sites are largely enclosed within fences or hoardings and these are denoted on the map by blue dotted outlines. Hedgerows and tree-lines are illustrated as 'existing green corridors'. Such 'Green Corridors' are distinguished from other links by the fact that they encourage wildlife and interconnect habitats. Whilst they provide both shelter and food for wildlife, they can also incorporate links for people, such as walking routes and cycle lanes.

The table below details relevant aspects of each colour-coded category shown in Map 4.18. and demonstrates the wide diversity and functionality of these spaces both within and near the LAP area. There is also a biodiverse rural hinterland to the northwest within the functional area of Flngal County Council.

Table 4.9 Existing Green Spaces – Details (refer to Map 4.18 for locations)

Green or Open space	Details
Destination Parks	Phoenix Park – Nationally significant historic park.
	Tolka River Valley Park
	Cardiffsbridge Park (extension of Tolka Valley Park)
Local Parks	Crescent Park (includes play area)
	Ashington Park (south of canal)
Natural and semi-natural greenspace	Tolka Valley – River Valley
	Canal Edge
Existing Green Corridors	Hedgerows, canal edge
Undeveloped lands with plant cover	Various undeveloped sites. Some have utilites in place.
	Attenuation pond area.
Outdoor sport facilities	Elmgreen Golf Club (to the northwest)
	Phoenix Football Club (to the northwest)
	Oliver Plunkett GAA grounds (south of canal)
	Coolmine Rugby Club
	Ashtown Stables (southwest of LAP lands)
	Ashington Park court/pitch (south of canal)
Other Green spaces	Private grounds of Ashtown House/demesne
	Grounds of Teagasc (Food research centre)
	Private residential courtyards and gardens.
Play facilities for children	Play area at Crescent Park





Recent biodiversity policy and legislation includes the National Biodiversity Plan 2011-16, Dublin City Biodiversity Action Plan 2008-12, the Wildlife Acts, and various provisions at EU level including the Habitats and Birds Directives, and the Bern and Ramsar Conventions. These all focus on the protection of important species and related habitats.

In relation to the LAP area, a baseline biodiversity study has been carried out and this informs the GI strategy. Survey work was conducted during the period Sept-Oct 2012 in accordance with best practice. Areas not normally available because they were screened off by hoarding were temporarily made available to facilitate some survey work. Specific areas studied included invasive flora, hedgerows and treelines, and ecological corridors/ Stepping Stones

Table 4.10 Habitats identified

Habitats present	Types
Aquatic	Artificial lakes/ponds, canals, drainage ditches, reed and large Sedge swamps, tall herb swamps.
Grassland	Amenity grassland, dry meadows and grass verges, wet grassland
Woodland	Riparian woodlands, mixed broadleave woodland, scattered trees and parkland, scrub, immature woodland, hedgerows, treelines.



For each of the above habitat types, both the biodiversity value and biodiversity potential was explored. In relation to the built environs, the merits of stone walls, buildings, flower beds, spoil and bare ground were also determined, and a hedgerow survey conducted. Waterways and wetlands provide a defining character to the northern and southern boundaries of the LAP area, and the Royal Canal is a proposed Natural Heritage Area. Tolka Valley Park includes an Integrated Constructed Wetland, which been successful in attenuating pollutants, and providing new habitats.

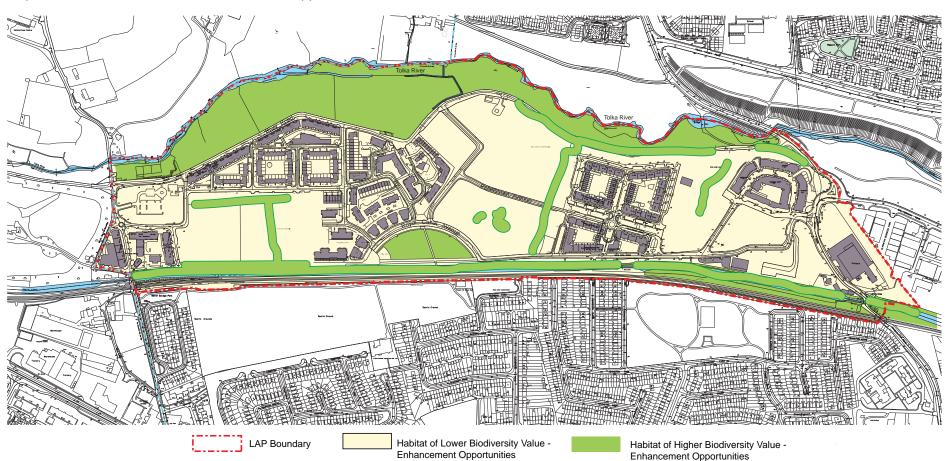
Table 4.11 below shows the diversity of habitats and the range of life they support. Many of these habitats perform important buffer functions, protecting waterbodies from pollution for example, or preventing excessive surface water runoff.

Location/Name	Habitat Code	Habitat Code	Habitat (s) of Conservation Importance	Buffer Function
Tolka River	FW2	Kingfisher, Bats, Otter, Lamprey Salmon, Trout, amphibians	River Tolka	Yes (Sea and estuarine environment from pollution)
Tolka Valley Park	WN5, FS1, WS2, GS2, GA2	Otter, Bat species, wintering and breeding bird species, amphibians	Rivers, Riparian Woodland, Calcareous Grassland	Yes (River corridor buffer and flood plain)
Royal Canal	FW3	Otter, Bat species and a range of bird species, rare and protected plant species.	Canal waterbody and fringing habitats	Yes (Sea and estuarine environment from pollution)
Walkway and park parallel to Royal Canal	BL3, WD5, FS1, GS2	Bird species, bat species, Otter	Parkland	Yes (buffer to Royal Canal)
Remnant treeline strip (in two areas previously cleared for development)	WL2	Bat species, wintering and breeding birds, amphibians.	Treeline, drainage ditch	Yes (Ditch from pollution)
Three large undeveloped and abandoned developed areas	GS2, BL3, WS1	Bat species (roosting and foraging), birds of prey, wintering birds, breeding birds	Temporary drainage ditches, treelines, rank grassland, invading shrub	No
SUDS attenuation pond in undeveloped lands	FL8	Amphibians, wintering and breeding birds	Aquatic habitat (simulating pond conditions), rank grassland surrounding with scattered trees	Yes (grassland/planted woodland area buffers SUDS pond)

Table 4.11; Habitats, Species and Conservation Significance.

The survey concluded that there are opportunities to provide temporary wildflower meadows on undeveloped lands, and to strengthen existing hedgerows. There is also scope for additional enhancement and connectivity to both the Royal Canal and Tolka Valley Park, and new developments can assist by providing increased native tree planting, planter boxes and green/brown roofs. Invasive species need to be controlled. Map 4.19 identifies GI enhancement opportunities, distinguishing between habitats of lower biodiversity value from those of higher value. Apart from the obvious areas around the canal and Tolka Valley, the areas of higher value include areas around attenuation ponds, and both established hedgerows and areas of biodiverse growth on undeveloped lands.

Map 4.19 Green Infrastructure Enhancement Opportunities



This plan encourages integration of features of high biodiversity value into new developments, including treelines and hedgerows. Whilst this might not always be feasible or may be difficult to deliver given urban design objectives, the option should always be explored as there may be opportunities for integration of key elements. Areas of lower biodiversity value include large areas of undeveloped lands and whilst many of these area earmarked for development, some biodiverse features may be integrated into new public or communal open spaces.

This LAP also encourages greater biodiversity in new developments by seeking, where possible, aquatic features as part of SuDS proposals. In landscaping schemes, native species should be included as part of a 3 – layed structure to include canopy, shrub and ground layers. (See Objective GI05).

Productive Landscapes;

Productive landscapes include urban farming, community gardens and allotments, and the use of open space for growing food and flowers has clear benefits. Securing appropriate locations and available lands for such uses can however be problematic. Nevertheless, there are opportunities for new initiatives such as allotments and community gardens as part of new developments and ideally these should form an integral part of the GI network. An area close to the proposed train station has already been identified as a possible community garden location (see section 4.5 Objective UD04) and this would be aligned with a green corridor connecting to Tolka Valley Park.





4.9.6 Incorporating Sustainable Urban Drainage Systems

SuDS form an integral feature of green infrastructure. They increase the capacity of the soils to absorb run-off, reduce the risk of flash flooding, improve water quality and provide amenity through the use of such design features as permeable paving, swales, green roofs, detention basins etc. and can achieve multiple objectives such as removing pollutants from urban run-off at source, controlling surface water run-off from developments and ensuring flood risk does not increase further downstream.

Limiting the amount of paved and other hard surfaces in new developments and the incorporation of surface water drainage systems into new developments is an objective of this plan. The development of the remaining sites on the plan lands provides opportunities for the incorporation of SUDS into all new developments. In compliance with the Greater Dublin Strategic Drainage Study (2005), the city development plan, and in line with best practice recommendations, SUDS measures shall be incorporated into all new developments where feasible and appropriate. Appendix 2 provides specific guidance on specifics of SuDS requirements for new developments, and the content of section 4.11 - ('environmental sustainability and sustainable design') should also be examined in this regard, as this includes a 'green points' system that encourages biodiverse design and SuDS that are integrated with other options for sustainable design. Green roofs and rainwater harvesting for example can assist greatly in stormwater management, and green roofs along with green/living walls have the added advantage of providing new habitats. Hence, the variety of habitats achieved by including SuDS features as part of a green network can add significantly to the amenity and attractiveness of new developed areas.

4.9.7 GI Strategy

Map 4.20 draws together various strands of GI into a single map, identifying existing resources and recommending new proposals for the LAP area. The intention is to achieve a biodiverse network, incorporating SudS options, green wildlife corridors, walking and cycling routes, and connections beyond the immediate plan area to nearby amenities. The objectives contained in the map incorporate and supplement objectives contained in other chapters and particularly those in sections 4.5 (urban design section).

The main components are;

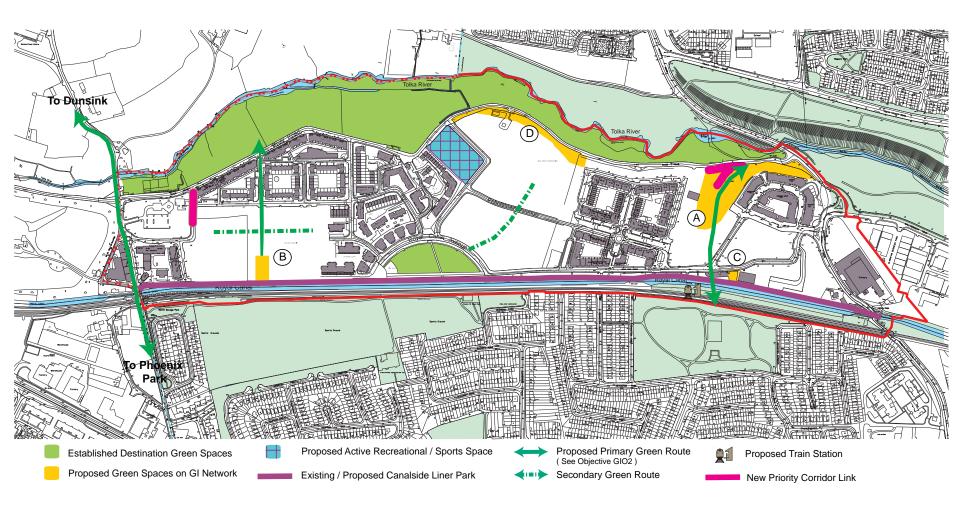
 Three separate 'primary green routes' providing new direct connections between existing strategic assets – the Royal Canal and the Tolka Valley. (Note that the primary green routes illustrated on the map are also set out in text as specific objectives at the end of this section). These are supplemented by suggested secondary links to expand the network.

- Four newly proposed green spaces on the GI network . These are positioned as follows :
 - A..around the attenuation ponds near Royal Canal Park
 - B.. within the '12 acres' adjacent to the Royal Canal
 - C ..at the local park adjacent to the entrance to the proposed train station to include a play space (& possibly community garden)
 - D ..at the northern end of Castlethorn lands on steeply sloping bank fronting river road.
- Two 'priority corridor links'
- A 'Green Points System' to encourage improved biodiversity and connectivity to the Green Infrastructure network, that will apply to all new developments. Please refer to section 4.11.3 for full details.

GI proposals in the area will fall into one or more of the following categories, the emphasis being on connectivity within an expanding network with eventual wide-ranging multifunctionality.

- Biodiversity and Ecological Value
- · Recreation, Access and Quality of Life
- Climate Change, Watercourses, and Sustainable Resource management.
- Food Production and Community Socio-economic Factors
- Landscape Character and Local Heritage

Map 4.20 GI Strategy







Undeveloped sites have potential to deliver new GI features and increased biodiversity. Whilst in the longer term there is the possibility of delivering new green corridors, swales and perhaps some permanent woodland, shorter term options should also be strongly considered. In this regard and taking into account the phasing programme for the three main undeveloped areas as set out in chapter 5, there are opportunities to deliver ..

- Temporary woodland
- Temporary food production space.
- Temporary wild flower meadows.

These can be relatively inexpensive to deliver and maintain, yet greatly improve the attractiveness and biodiversity of an area pending eventual development. Because the phasing programme for each of the main landholdings specifies the sequential order in which development should progress, it is the areas phased for later development that are the obvious choice for such temporary interventions and these can form an attractive features when delivered. In choosing which of the three options (food production, woodland or flower meadows) to select, it is necessary that regard is had to the amenities of surrounding properties, site suitability,drainage conditions and the established ecology.

Green Infrastructure Policies

- **GI 1** To encourage the development of opportunites for green infrastructure, both within the plan area and connecting to surrounding lands
- **Gl 2** To implement a green infrastructure strategy in accordance with objectives herein and map.
- **GI 3** Applications for significant site development to demonstrate how the proposed development will contribute to green infrastructure and biodiversity'.
- **GI 4:** Any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article (3) of the Habitats Directive.
- **GI 5:** To enhance the biodiversity value of the local area by protecting habitats, in particular along water bodies, and creating opportunities for new habitats through appropriate native species landscaping schemes to integrate the natural environment with high quality urban development and to control / remove invasive species.

Green Infrastructure Objectives

- **GIO1:** To complete the linear park along the Royal Canal in tandem with new development, enhancing biodiversity and ecological value, and improving amenity value for those using the towpath.
- **GIO2** In association with objective UD06 to provide/complete the following south-north green links from the Royal Canal to entrances to Tolka Valley park. Design and planting of these links should encourage biodiversity through careful selection of tree species and under storey planting.
 - (a) Through Ballymore lands from a proposed civic space adjacent to the entrance to the proposed train station (see objective UD04) at the Royal Canal through a proposed new public space incorporating existing attenuation ponds, to Tolka Valley Park. This shall be designed to function as an ecological corridor with associated recreational space.

- **(b)** Through former Capel lands (the 12 acres) from a planned green space near the canal through Rathborne Avenue a proposed new public space incorporating existing attenuation lakes, to Tolka Valley Park.
- (c) In association with urban design objective UD07 of this plan and proposals by FCC, to provide a link from the eastern end of the LAP lands at Ashtown Road, to Dunsink Observatory.

GIO3: To support Fingal County Council in relation to their proposals to prepare a coordinated brief, to include pedestrian/cycle links, for all Royal Canal crossings and development adjacent to the Royal Canal.

GIO4: To implement a Green Points System as set out in section 4.11, as a flexible means to achieve improved green infrastructure for new developments, and incorporating a high level of biodiversity. (see also objective ES01 in chapter 4.11)

GIO5 Landscaped and amenity areas to address biodiversity and where possible provide aquatic features as part of SuDS proposals. Native species should be included as part of a 3 – layed structure to include canopy, shrub and ground layers.

GIO6 Amenity and/or security lighting shall be designed to minimise negative impacts on protected species such as bats. Such designs may include directional/cowled lighting or be based on the advice of an ecologist. Particular attention shall be paid to areas close to water bodies.

GIO7 To retain and enhance, where feasible, remnants of existing hedgerows and treelines.

GIO8 To encourage the development of community gardening and provision of allotments at appropriate locations in new schemes.

GI09 To support short term options for appropriate planting of areas of undeveloped lands pending future development and with regard to phasing programmes set out in Chapter 5.

GIO10 For new developments to examine the fesibility of connecting new swales to existing ones – thereby lengthening the existing linear habitat.





4.10 Community Infrastructure

To ensure that the existing and future Ashtown-Pelletstown plan lands are adequately served by a wide range of quality community and cultural facilities and infrastructure to serve all ages including educational and childcare facilities, flexible spaces such as community/cultural centres, outdoor activity areas for children and adults, playgrounds etc. All facilities and spaces should be fit-for-purpose, accessible by all, conveniently located, well designed and discourage anti-social behaviour.

4.10.1 Introduction

The importance of creating sustainable communities and neighbourhoods in the city cannot be over-emphasised. Creating such communities, the timely provision of sustainable civic infrastructure, the integration of new communities and accessibility issues have all been afforded much greater attention in recent years, both nationally and locally. Improving the quality of life is the underlying objective.

Ministerial Guidelines on *Sustainable Residential Development in Urban Areas* (2009), and statements on housing policy stress the importance of integrating housing provision with the delivery of community infrastructure. As stated in the national guidelines the integration of schools, community facilities, employment, transport and amenities with the housing development process in a timely, cost effective way is what sustainability is all about. Neighbourhoods require a range of community facilities to underpin them, including schools, libraries, community centres, cultural spaces, health centres, facilities for the elderly and persons with disabilities, crèches and other childcare facilities etc. The timely provision, convenient location and safe connection of such facilities to residential areas can have hugely positive impacts on the promotion of social inclusion, greatly enhance quality of life and greatly aid in the creation of sustainable communities.

Dublin City Council has placed the creation of sustainable neighbourhoods and socially inclusive communities as one of the three strands of the city's core strategy of the Dublin City Development Plan 2011 - 2017. The approach of the City Council extends the focus beyond the residential unit and the scheme and places emphasis on the quality of the surrounding area, particularly on the value of community infrastructure for sustaining and supporting strong communities. The City Council's settlement strategy prioritises the inner city, KDAs, SDRAs and KDCs with investment and growth, and this LAP area is a designated KDA and SDRA.

National, regional and local planning policies and guidelines all highlight the pivitol role that community infrastructure plays in helping to build, reinforce and maintain successful communities, particularly in newly emerging urban areas.

Recent Ministerial Guidelines issued in June 2013 titled *Local Area Plans*; *'Guidelines for Planning Authorities'*, require that local area plans should place an emphasis on providing walkable, mixed-use, & mixed tenure neighbourhoods with active streets, conveniently-located neighbourhood facilities commensurate with projected populations including playground/ play areas and measures to encourage local people to adopt healthier ways of travelling around their local communities.

<u>Existing and Permitted Civic Infrastructure in Ashtown-Pelletstown Plan</u> Lands

As detailed in Chapter 2 of this plan, some community facilities have been provided and are operating in the Ashtown-Pelletstown area at present, including two crèches, a small community centre, a residents' only gym, a public gym, a dentist's surgery and a pharmacy, with the majority of these located on the western / Rathbourne end of the plan lands. Along with these facilities planning permission has also been granted for additional community facilities as part of larger mixed use schemes such as additional crèches, a leisure centre, medical facilities, a supermarket, and a cultural/community centre. However the majority of these facilities and residential units were not built, and it is likely that the planning permissions granted will expire and applicants will reapply for permission to develop mixed-use schemes on remaining sites.





4.10.2 Policy Direction

With regard to the more specific issue of the provision of community facilities in new developments across the city, policy of the city development plan requires all schemes with a residential element to include an element of civic infrastructure with the required level of provision increasing as the size of the development grows. While the original plan for Pelletstown in 2000 made little reference to the provision of specific community facilities a key overarching objective for the plan area was 'to encourage the creation of a sustainable living environment for the new community in a rich urban area.' This living environment was to be diverse with a mix of land uses integrated with public transport. A site reservation was set for a new primary school with the adjacent site earmarked for playing pitches. Two new pedestrian bridges were planned to traverse the canal and railway line allowing for direct access into the sports grounds to the south. Public art was to be integrated into the design of streets and public spaces. The majority of these objectives still remain appropriate and this LAP will provide guidance for the future development on the remaining sites.

Most of the facilities provided to date are operating, while some remain earmarked as 'community facilities' but remain vacant as part of overall larger empty and mainly commercial buildings. Those facilities that are operating serve to support the existing residents of the 2,100+ homes built in the area to date. However from a review of what has been built to date and from the majority of submissions received at the public consultation stage, it is clearly stated that additional community facilities are required. This includes the need for existing facilities that have been built to begin operating as well as the provision of further facilities. Submissions received from people living in the area cite a number of facilities that are required and include i) a primary school, ii) additional crèches, iii) outdoor jogging paths/adult gyms, iv) community centre, and v) facilities for teenagers and older people. As new developments come on stream in the LAP area, there will be a requirement to provide community facilities as part of the development, and with the proposed increase in the proportion of familysized units the demand for community facilities to support these new residents will increase further.

Development plan policy sets out the various design and development standards for infrastructure (including community infrastructure) provision expected having regard to the scale/extent of development proposed. These standards for community infrastructure are summarised in Table 4.12 and will apply to all developments proposed in the plan area. Requirements relating to urban design, crèche provision, public art, and childrens play are common to most categories, with an increased emphasis on community needs, school provision and phasing requirements for larger-sale developments. For any proposed development, requirements outlined in the table need to be considered with regard to structuring principles, urban design aims, and other objectives of this LAP.



Table 4.12 Social infrastructure requirements for various scales of proposed development.

DEVELOPMENT	SOCIAL INFRASTRUCTURE REQUIREMENT
15 residential units+ or 1,500sq.m.	Demonstrate how the proposal constitutes a positive urban design response and how it contributes to place making
75 residential units+	Urban design statement + Crèche + Children's play facilities
100 residential units+ or 10,000sq.m. & Public Transport Infrastructure	Urban design statement + Crèche + Children's play facilities + Contribution to social infrastructure
200 residential units+ or 20,000sq.m.	Urban design statement + Crèche + Public Art + Children's play facilities + Significant contribution to social infrastructure + Community Infrastructure Statement + Cultural Impact Assessment + Phasing and Implementation programme + Report identifying the demand for school spaces and an assessment of the capacity of the local schools
800 residential units+	Urban design statement + Crèche + Public Art + Children's play facilities + Significant contribution to social infrastructure + Community Infrastructure Statement + Cultural Impact Assessment + Phasing and Implementation programme + Phased completion of dwellings linked with provision of new schools

The manner in which the LAP will approach the provision of identified key pieces of social infrastructure is dealt with below.

4.10.3 Primary School

Planning guidelines issued in 2008, *The Provision of Schools and the Planning System: a Code of Practice for Planning Authorities,* seek to ensure that the planning system facilitates the timely and cost-effective roll-out of school facilities by the Department of Education and Skills (DES). The provision of schools is an integral part of the development of a compact and sustainable urban community. The DES is responsible for planning and developing schools while it is the responsibility of the planning authority to cooperate and coordinate with the DES in ensuring the timely provision of school places and the transfer of sites to the DES. The 2008 ministerial guidelines acknowledge the critical role that the planning system plays in anticipating future development and coordinating the provision of a community's essential supporting infrastructure including schools and amenity facilities.

Since 2000 a site has been reserved for a new primary school on the plan lands. This school was to be located on a site towards the centre of the plan area adjacent to a site identified for new playing pitches. The pitches were to be shared, accessed and used by the school as well as the wider residential community. To date these sites remain undeveloped.

The selected school site is adjacent to a site identified for playing pitches and a significant amount of existing and proposed residential development and as such allows for the possibility of sharing facilities. There is an opportunity for the Council to enter into partnership with the DES to achieve the provision of a shared school hall as a community resource.

Until such a time as a permanent school is provided in the plan area, the LAP will also promote the development of a primary school on a temporary basis on this site or on other suitable sites in the plan area. This temporary school may consist of temporary structure(s) or alternatively the temporary school facility may be accommodated in an existing building(s) in the area. In all cases, the planning authority will implement the Planning and Development Regulations 2008 on exempted development for temporary school accommodation to expedite the provision of temporary school facilities. See map 4.21 for possible locations for a temporary primary school.



4.10.4 Childcare Facilities

Ministerial Guidelines on Childcare Facilities place emphasis on the fact that access to good quality childcare can benefit children, parents, employers and communities in general. Dublin City Council recognised that quality childcare in a variety of locations is an integral component of successful mixed-use areas.

The pre-draft plan submissions received vary in their suggested approaches to the provision of crèches, with the main stakeholders citing an overprovision of crèches in the area and the residents of the plan area requesting that additional crèches be provided for. While one of the existing crèche facilities appears to be operating well the second crèche, possibly due to its location, does not appear to be operating as successfully. A third crèche built has not opened as a crèche to date. The Dublin City Childcare Committee has indicated that there is a shortfall in community (affordable) crèches in the area and to has advised that i) crèches (preferably community-run) should continue to be provided as part of new mixed-use schemes, and ii) that a larger crèche (possibly between two or more developments) be provided in the area. In regard to the western hub, it is considered appropriate that a crèche be provided as part of any future development on the marketing suite/carpark site (Castlethorn) where such a facility can integrate well with a mixed use scheme.

Having regard to the advice of the Dublin City Childcare Committee, the LAP's policy to provide an additional 920 - 1270 new residential units (see housing chapter) and the policy of providing an increased percentage of more family-friendly units in the area, it is clear that the demand for childcare spaces will increase. While there are a number of crèches in the wider area outside of the plan lands, these are not easily accessed by the residents of Ashtown-Pelletstown plan area. The City Council will therefore require the provision of additional childcare spaces and will support the provision of both stand alone facilities and larger-sized combined crèches depending on the design of developments proposed. Larger units can offer a variety of services – sessional/drop in/after school etc. Suitable indicative locations for childcare facilities have been identified on map 4.21 and include locations on the '12 acres' site, a centrally located site, and also at the eastern end of the plan area.

Play Spaces

The importance and necessity of play for children (0 to 18 years) is recognised by the City Council and expressed in detail in Dublin City's Play Plan 2012 – 2017. Play is acknowledged as a fundamental and integral part of healthy development and well being, sowing the seeds of experience, encouraging children and young people to learn and develop as individuals and as members of their communities. The vision for Dublin is that the city will be a child-friendly and playful city where all children and young people can enjoy their right to play.

Within the LAP lands there is one publicly accessible playground located in the crescent park. It is well-used, overlooked by adjoining residential units and easily accessed. It is considered appropriate, having regard to the existing and proposed population for the plan area, that additional





playgrounds and play spaces be provided. In line with city council policy, new play facilities are to be provided in new residential schemes containing 75 residential units or more.

These spaces should be designed to encourage varied and physically active play, be within easy walking distances of children's homes or within the curtilage of a residential block, and be of a high standard and overlooked.

Map 4.21 illustrates indicative locations of play spaces/facilities, - one located in each of the large undeveloped sites. In this regard the proposed play area adjacent to Royal Canal Park would be located within the setting of a new park and it is intended that this would be the largest of the new play areas being provided – being located near the eastern hub and adjacent to an existing higher density scheme.

The provision of playgrounds in public spaces such as squares and plazas adjacent to commercial facilities, and on a temporary basis on undeveloped lands will be encouraged in the plan area. Indoor recreational facilities will be required where it is considered that there is sufficient public open space in the vicinity.

(For details on the provision of parks and allotments see chapter 4.9 - Green Infrastructure).



4.10.5 Community / Cultural Centres

The provision of community and cultural facilities helps to build connections within an emerging community and facilitates the integration of communities with the surrounding neighbourhoods in the wider area. Dublin City Council, in partnership with key cultural stakeholders, has devised a Cultural Strategy (2009 – 2017). This strategy sets outs a shared vision that culture is integral to the city's identity and quality of life. Over the lifespan of the strategy the City Council seeks to lead and support the development of culture in the city, support artists, create opportunities for everyone to participate in culture, develop cultural infrastructure, recognise that culture is essential to the city's economic vitality, and ensure that culture plans a significant role in urban regeneration and reflects the identity of Dublin's neighbourhoods. The city development plan supports the implementation of the cultural strategy and includes policy that all local area plans incorporate relevant priorities and actions of the cultural strategy.

In Ashtown/Pelletstown there is one small community centre operating in the River Centre and a second facility available in Royal Canal Park. The latter remains unfitted but is understood to be generally suitable for community use subject to this being resolved. Given the planned higher density development around the eastern hub and public square, it is considered that this is an appropriate location, mirroring the facility on the western side of the plan lands at the River Centre. Such rooms can accommodate a range of events such as for meetings, displays, talks and functions for example.

The above approach of maintaining two centres in the medium to longer term is seen as appropriate to meet local needs, yet should demand arise there is also scope in the shorter term for use of empty units throughout the plan lands for cultural/community uses, including more specialist uses such as art galleries or other cultural or individual creative activities.

TURAS project – Community Aspects

The TURAS project is an EU-wide initiative, the acronym meaning 'Transitioning towards Urban Resilience and Sustainability'. It aims to see how resilience measures can be developed in the face of challenges to sustainability. New transition strategies at an EU wide level can help reduce the urban ecological footprint, and local communities can get involved. Such strategies being developed in association with University College Dublin may include re-use of derelict sites, improving biodiversity, reducing energy consumption, and reducing flood risk. These aspects are being studied at present in association with European partners. Some areas of the Ashtown/Pelletstown LAP lands may be suited to project work relating to the above, and with landowners agreement there may be opportunities to develop projects encouraging active community involvement.

4.10.6 Sports Facilities

In addition to walking and cycling objectives in this plan, active sports facilities should be within easy reach of residents without the need to drive. Within the plan area, the only active sports facilities are two operating gyms; one located in the River centre at Rathbourne and a second one (for residents only) at Royal Canal park. Provision within the LAP area is weak in regard to availability of active sports facilities. The range of sports facilities within a 2km radius is however very good, and includes existing GAA sports grounds and a clubhouse at Martin Savage Park to the south of the canal, and also tennis courts and other facilities at Ashington Park, also south of the Canal (eastern end). The closest community centre is Cabra Parkside Community Sports Centre, approx. 1.5 km to the southeast, on Ratoath Road. This has modern facilities including a skateboard park, a children's playground, games pitches, a gym, and classes/activities aimed at both adults and children.

Further to objectives of the AAP, this LAP aims to deliver open space / sports pitches , which will be available to the local community, on the site immediately south of the school site. In time, it is expected that there will be beneficial synergy between school activities and community uses in this centrally positioned site. The school hall will be community-focused and publicly available for a range of uses. In addition to the above, the provision of outdoor adult gym equipment is recommended in tandem with new development at selected locations indicated on map 4.21. These locations are selected having regard to ease of access for those using the canal towpath and Tolka Park. In addition, and benefitting from the newly enhanced routes in the Tolka Valley Park, there is scope for an attractive 'sli na slainte' circular walking route, encompassing both the river valley, the canal towpath, and along attractive biodiverse routes interconnecting the two.

By planning for the above facilities in tandem with the more general expansion of walking and cycling routes and new infrastructure (including green infrastructure), a sustainable network of leisure and sporting facilities will be achieved, reducing reliance on travel to facilities outside the plan area.







Community Infrastructure Policies

- **Cl1.** To ensure the provision of community, cultural and educational infrastructure in the Ashtown-Pelletstown plan area in line with the standards set out in Table 4.21 above and relevant development and design standards of the Dublin City Development Plan 2011 2017.
- **Cl2.** To facilitate the provision of educational facilities in the plan area by way of an integrated approach between the Department of Education and Skills, school authorities and Dublin City Council.
- **Cl3.** To support and facilitate the use of vacant commercial units and sites for publicly accessible cultural workspaces, performance venues, arts galleries etc on a temporary basis.

Community Infrastructure Objectives

- **CIO1.** To actively promote the development of a new primary school on the reserved school site, and seek to enter into partnership with the Department of Education and Skills to achieve the provision of a school hall as a community resource.
- **CIO2.** To provide one new larger size play facility adjacent to the canal at Royal Canal park as part of a new public open space; and that smaller local play facilities are provided within developing areas.
- **CIO3** To promote the area of the Royal Canal and Tolka Park as active community resources for leisure purposes, and to examine the possibility of (i) developing a sli na slainte circular route interconnecting both, and (ii) installing outdoor 'adult gym' facilities at appropriate locations as part of sport promotion.
- **CIO4** The Council, in conjunction with the HSE will facilitate the development of a health care service within the LAP area.





4.11 Environmental Sustainability and Sustainable Design

4.11.1 Introduction

This LAP aims to reduce reliance on unsustainable energy by promoting green alternatives and ensuring sustainable principles and sustainable design are integral to the development process. Implementing best practice through innovative design will assist greatly towards meeting the aims contained in the Councils Climate Change Strategy.

Given that there are substantial areas of lands for development within the LAP boundary, generally in large plots, these are considered conducive to comprehensive implementation of green design and engineering measures.

This sustainable vision is promoted in this LAP through four policy approaches below:

- 1. Encouraging a mix of use types in the area, to support the development of sustainable residential communities.
- 2. Modern green building and block form design, with high BER ratings, maximising opportunities for both reducing energy consumption, exploiting sustainable energy options and conserving water. A Green Points System can assist significantly in this regard.
- 3. Encouraging high levels of use of sustainable modes of transport by promoting walking, cycling and public transport within the LAP area. Implementation of Green Infrastructure objectives can help make walking and cycling routes more attractive and biodiverse.
- 4. Promoting and supporting improvements in the public realm which reduce energy consumption, support SUDS, increased carbon sequestering and supporting CHP (combined heat and power) district schemes.

Through the promotion of a sustainable land-use strategy, new development should have an inherently low carbon footprint, and the proximity of local, well established amenities should lessen the transport needs in the area. This approach hence promotes sustainable transport given proximity to existing and proposed public transport options.

Given the extent of planned residential development, the type and design of housing units is an important consideration. New residential units should be designed with flexibility in mind, as sustainable communities should include the delivery of a housing mix with inbuilt adaptability to changing circumstances within a family's life-cycle. The inclusion of elements such as community gardens, both public and private open space (such as roof gardens and courtyards) and integrated amenities can increase the quality of life for residents in the area.

4.11.2 Sustainable Design

Sustainable design is promoted in this LAP by focusing on five elements

- (i) built fabric;
- (ii) design and layout of buildings;
- (iii) energy and
- (iv) carbon impact of construction, and
- (v) a Green Points System.

The LAP seeks to achieve development which utilises state of the art energy efficiency policies and best practice technologies to reduce resource consumption and promote environmental sustainability.

New developments within the LAP area should, where possible, seek to maximise energy efficiency through their location, design and/or make appropriate use of energy conservation techniques, and go beyond the current minimum building regulations requirements. Building design should maximise natural daylight and ventilation opportunities, incorporate grey water re-use and green roofs and/or walls where possible.

In combination with the materials chosen and physical attributes of building design, sustainability should also inform key urban design elements such as creating attractive micro climates in key public or private public spaces, maximising passive solar gain, reducing overshadowing and addressing wind tunnel impacts. A key part of sustainable building and reduced carbon footprint is the energy consumption of heat, light and power of a building. Opportunities to source these forms of energy from sustainable sources should be exploited.

Solar panels, geothermal and CHP are some of a number of options which provide renewable energy sources, and can also bring economic benefits. CHP (combined heat and power) on (or near) site production of heating, lighting and cooling has been shown to be very sustainable in terms of efficiency and is most efficient when there is a suitable mix of uses for energy centres. This and other renewable energy system options should be considered for larger sites and also longer term proofing of design to facilitate connection to district scale schemes.

In terms of sustained energy demand, the use of compatible uses such as day and night-time loads and cooling and heating – i.e. commercial and residential use respectively, lends itself to the use of energy centres of CHP. Carbon imbedded in buildings, through the materials, processing, delivery and construction impacts is significant. New buildings should be designed so that other types of uses can be accommodated in the future, ensuring that the building and the carbon invested in it will be fully used and be sustainable in the long term.

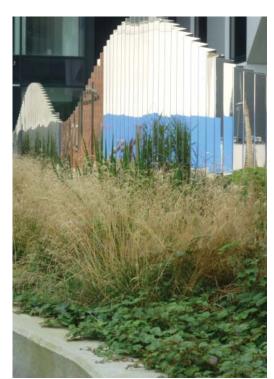
In compliance with the Dublin City Development Plan, developers are required to provide a sustainability statement to illustrate measures proposed to increase energy efficiency, reduce resource consumption and minimise waste generation.

4.11.3 Green Points System.

A 'Green Points System' has been adopted by a number of Local Authorities in Europe . It provides a method by which it can be ensured that a range of sustainable design features are integrated into new schemes by implementing measures to encourage a high level of biodiversity and reduced surface water runoff. When implemented, these measures also add to the general attractiveness and diversity of schemes.

Adapting the points system to the Ashtown/Pelletstown area, - based on and modified from the Swedish Green Points List, Dublin City Council will seek a range of measures to be implemented, yet provide considerable choice for developers in relation to the range of measures applicable. This recognizes the diversity of anticipated development forms and built contexts.

DCC will require a minimum of 7 items from the following list of Green Points Statements to be addressed in all proposed developments. These should be addressed in detail in any planning application. A number of bird boxes should also be provided within the overall scheme.











- 1. Biotope specified insect habitats are provided within courtyards or new landscaped areas.
- 2. Bat boxes are provided within courtyards and landscaped open space areas within housing schemes.
- 3. No surfaces in courtyards or driveways/front gardens are sealed, and all surfaces are permeable to water.
- 4. All non-paved surfaces within courtyards and rear gardens have sufficient soil depth and quality to grow vegetables.
- 5. The courtyards include a naturalized garden with varied elements.
- 6. The majority of walls are covered with climbing plants.
- 7. There is 1 sq metre of pond for every 5 sq m of hard surfaced area in the courtyard.
- 8. Vegetation in the courtyard or new pocket parks is selected to be nectar rich and provides a variety of food for butterflies.
- 9. There are no more than 5 trees or shrubs of the same species.
- 10. All stormwater flows for at least 10 metres on the surface of the ground before it is diverted into pipes.
- 11. The courtyard is green but contains no mowed lawns.
- 12. There are frog habitats within the courtyards or pocket parks as well as space for them to hibernate.
- 13. Conservatories/greenhouses are provided within courtyards.
- 14. There is food for birds throughout the year within the courtyard or in new landscaped areas and pocket parks in housing schemes.
- 15. Whole courtyard is used for cultivation of vegetables, fruit and berries.
- 16. Developers liaise with ecological experts.
- 17. Grey water is treated in the courtyard and re-used.
- 18. Biodegradable household and garden waste is composted.
- 19. At least half the courtyard area consists of water.
- 20. A section of the courtyard is left for natural succession.
- 21. All the buildings have green roofs and gardens.
- 22. Each new garden in new housing areas is provided with a native tree or fruit tree.
- 23. Tree species used for roadside verges are chosen to provide visual variety, and have a planted understorey/shrub layer to attract wild-life, providing a biodiversity corridor and replacing traditional grass verges.

Environmental Sustainability & Sustainable Design Policies

- **ES1**. To seek that new developments utilise state of the art energy efficiency techniques and best practice technologies to reduce resource consumption of the earth's resources and promote environmental sustainability.
- **ES2**. Through design, to enable opportunities within the form, use mix and orientation of the buildings to maximise solar gain and minimise heat loss.
- **ES3**. To promote the use of environmentally sustainable technologies and facilities within any development in the LAP area such as the inclusion of CHP (Combined heat and power) units on site, community recycling facilities, grey water collection facilities, green roofs and green walls.
- **ES4**. To seek opportunities within larger block developments to create efficiency in energy consumption both in buildings, blocks and in use of public transport, with future-proofing of systems to facilitate district wide schemes in the future.
- **ES5**. For larger schemes and larger/tall buildings, building design will give careful consideration to the design and arrangement of buildings on a site in relation to the development of a microclimate. New developments should be future-proofed to aid in the conservation of energy and maximize solar gain and renewable technologies.
- **ES6.** All buildings including housing units should incorporate flexibility in form and internal design in terms of size and tenure. Building design and technology used should allow for adaptation and for change of use in the long term. A building should not become obsolete on cessation of an activity, but should be capable of facilitating new activities without onerous renovation, in order to conserve "embedded energy".
- **ES7**. To promote the use of environmentally sustainable materials in the construction of any development in the LAP area.

Environmental Sustainability & Sustainable Design Objectives

ESO1 To implement a 'green points system' for all new developments in order to meet environmental objectives and to ensure an attractive and biodiverse living and working environment.

ESO2 With the support of residents, to promote the development of a community garden in association with the development of a community plaza adjoining the entrance to the proposed train station.

ESO3 To seek that communal areas of buildings, including stairwells, corridors and foyers, are effectively designed to use low levels of energy in the form of lighting and heating, and minimising heat energy loss.





Chapter 5: Phasing & Implementation

5.1 Introduction

For Dublin City Council, the success of the LAP is dependent on the achievement of an active and integrated residential community, within a sustainable high quality built environment. This chapter seeks to set out the steps necessary to facilitate the delivery of this goal, and the identified policies and objectives of the LAP outlined in the previous chapters.

In recognising the challenging economic environment, and to address key concerns regarding vacant sites, this chapter identifies both the long term overall phasing and site plans for the remaining sites within the area; and also identifies a series of options and possibilities to achieve interim uses and improvements to improve the quality of the built environment and experience in the short and medium term.

5.2 Phasing & Sites Strategy

One of the challenges identified by the submissions received at the start of the process of preparing the LAP was the severance that exists across the LAP area. When this area commenced development it was not envisaged that the lands separating individual phases would remain vacant for any significant period of time. However due to the collapse of the housing market in 2008 all development ceased and sites were not progressed, leaving the existing estates separated by vacant lots. The aim of this phasing strategy is to set out a clear intent as to where development should commence and what facilities and connections should take place with each phase. By identifying this phasing strategy, development in each of the three main landholdings can progress within a structured approach and meet targets of housing mix and diversity, linking up existing communities, improve passive supervision of key walking and cycling routes and provide new facilities and infrastructure. While it is recognised that the scale of the sites in question are not large, it is also recognised that the pace of development in the immediate future will be slower than previously experienced. For this reason a clear phasing strategy was considered appropriate to include in the LAP.

Phases are identified as 1, 2 or 3 within each landholding; to reflect the fact that the timing of phases in each landholding will differ. In certain circumstances, Dublin City Council may allow a later phase proceed ahead of earlier phases where it is clearly shown by the applicant that the benefits of having this phase proceed earlier are significant, in that it addresses connectivity within the LAP area, resolves problems identified by the LAP or provides important physical or community infrastructure.

Each phase can be completed as a series of separate permissions within each phase or if appropriate, phase 1 and 2 can be combined as one permission. Permissions for later phases will not be considered until significant elements of the previous phase, including key infrastructural works are under way. Exceptions will be made to the phasing only where alternative arrangements also ensure that the specific infrastructure identified for each phase is delivered.

For all phase 3 sites shown in the LAP earlier applications in phase 1 must include proposals for the upgrading of these sites until development happens. As these sites are not likely to be developed in the immediate future, it is not considered appropriate that temporary hoardings remain on these sites as they are not active development sites. Proposals for improvement can involve levelling and grassing of the site, temporary planting such as meadows and if needed, new fencing that is visually pleasing. Options for other temporary uses will also be considered where they benefit the LAP area and do not negatively impact on the residential amenity of adjoining properties.

For all phase 1 applications, the documentation supplied shall demonstrate how this site will integrate with later phases as a minimum and for certain sites the inclusion of an overall masterplan layout will be necessary to provide a clear context for the application.

For each landholding and phase, principles for the design and built form are described; the character of development and the relevant infrastructure requirements for each.

5.2.1 Capel Site.

This is a rectangular site located on the western part of the LAP, extending for approximately 4 hectares bounded to the south by the canal towpath and by development undertaken by Castlethorn Developments to the east and north, now Rathbourne Village and Rathbourne Avenue.

The site has been visually improved recently, with the hoarding and building materials removed and the areas fenced and grassed.

The LAP seeks that this site is built out with a mix of residential units, with the density across the entire site to generally achieve densities in the range of 40-80 units per hectare; with the higher densities located closer to the Village centre and lower densities to the east and north of the site.



General Design Principles.

Development on this site must achieve a number of key design principles, and future applications for permission must incorporate these in the proposed layouts and design. The initial permissions shall include a site masterplan showing how the overall scheme is proposed to integrate with existing development surrounding the site and the proposed permission, and incorporate the design principles outlined below.

The design principles seek to provide a structure for integrating this site with surrounding developments, and to complete key urban design elements of the overall LAP where they impact on this site. They also seek to give legibility, permeability and coherence to future development.

- Provide for a series of urban blocks to shape the pattern of development, providing housing frontage directly onto each boundary road and strong permeability with new east west and north south connections through the site.
- Provide for a strong visual presence addressing the tow path, to integrate visually with existing development and to provide strong passive supervision to the canal. Development facing the towpath on the southern boundary shall be generally 4 storeys, interspersed with 3 storeys and can comprise of duplex units, apartments or terraced houses. Height along the canal should step up to 5 storey adjacent to Rathborne Village to achieve visual integration with the existing developments.
- Provide for a linear park as part of the towpath, at a minimum of 10m width to integrate with the existing linear park provided to the east
- That the urban blocks immediately adjoining Rathbourne village deliver a higher density form to integrate visually with the Village both in height and built form, rising up to 5-6 storeys in south west quadrant.
- Provide for a new pocket park, centrally located within the site to serve the housing, with active play facilities and adjoining a new a green link/avenue connecting to Tolka Valley park along Rathbourne Way and out to the Canal towpath.
- Provide for a minimum of 2 new access points onto the towpath along the southern boundary to improve accessibility and safety on the towpath.





Phasing

This site is divided into three phases, shown in Figure 5.1. Each phase can be completed as a series of separate permissions. Exceptions will be made to the phasing only where revised arrangements also ensure that the specific infrastructure identified for each phase is delivered.

Phase 1 will provide for a greater proportion of family housing and provide overlooking of the road and integration between Rathborne Village and the existing housing at Rathborne. Densities in the range of 40-50 units per hectare will be provided.

Phase 2 will also provide for a greater proportion of family housing. The inclusion in this phase of the area addressing the Canal is critical as it will provide for increased levels of passive supervision and activity along the route. Required of this phase will be the completion of the towpath and associated linear park on the southern side of the Phase 2 site, so that greater connectivity and activity is provided alongside the canal. Densities are sought in the order of 50-70 units per hectare.

Phase 3 will provide for a more mixed typology of units, with apartments, duplex and townhouses sought. This phase shall complete the pocket park and green route running north south through the site. Densities are sought above 70+ units per hectare.

5.2.2 Castlethorn Lands

This holding involves two separate parcels of land separated by completed developments by Castlethorn. One site is centrally located within the LAP area, and is approximately 6 hectares and the second site is located on the north west corner of the LAP, and is approximately 1.2 hectares. Both sites are currently hoarded, with the smaller containing the former sales unit and associated car park.

For these lands the LAP seeks to preserve two key elements of the 2000 Action Area Plan, namely the reservation of the school site within the central site and a differentiation in densities and house types across the LAP so that the higher densities are located proximate to Ashtown (and second proposed) train station and the moderately lower densities are located centrally within the LAP.

General Design Principles.

- Complete the built edge to the crescent on the 6 ha site on the southern boundary to give enclosure and presence for the half moon park, using a building height that equates with the existing housing developments completed on the crescent and using a high quality design to complement existing buildings and create visual interest.
- Provide for a greater percentage of family size housing in the central
 6 ha site with local pocket parks integrated with housing.



- Provide for strong permeability through the larger site, incorporating
 the opening of the east west link road centrally within the site and a
 series of smaller connections attractive to pedestrians and cyclists
 north south to connect Tolka Valley Park through to the crescent
 park and the Canal towpath.
- That the smaller site provide for a high quality residential scheme, with the option of some limited mixed use, with a more urban character and form, complementing the existing Village and recognising its proximity to the train station. The design of the buildings should define and address Ashtown Road and River Road and provide a high quality frontage, recognising its prominent location marking the entrance to the LAP area.

Phasing

This site is divided into three phases, show in Figure 5.1.

Phase 1 will consist of predominately family style housing, and will provide for new connections to integrate this phase with the existing built housing by opening two access roads (one on the western edge leading into the area and the second east west, eventually connecting to Phelan Avenue), and new amenities including a pocket park and an all weather playing pitch adjacent to the reserved primary school site. Densities provided will be between 40-60 units per hectare

Phase 2 will also provide a good mix of family housing, but with densities slightly increased and typologies more mixed, and also providing for completion of the crescent by developing a housing form of minimum 4 storeys in height to fully complete this design feature of the LAP. Densities provided will be approximately 50-70 units per hectare.

Phase 3 is the individual site located adjacent to the Village. This site will provide for a denser typology of housing, with the option of some limited commercial, community or retail uses, as an expansion of the existing Village centre. Building heights need to be in keeping with the established heights to the south and to the east; with a graded height profile to allow for optimum integration, balanced with providing for maximum light penetration within the development for the residential units and also providing strong passive supervision overlooking Tolka Valley Park. Densities for this phase shall be 80 or above units per hectare. In relation to public bus services, the developer shall liaise with Dublin Bus at design stage in regard to providing a bus stop/terminus, appropriately integrated into the layout/design for this phase. This should be positioned on the site so as (i) to facilitate ease of public access from the area generally, - including access to the rail station, and (ii) to mitigate any potentially negative impact on the amenities of existing or future residents in the area.





This holding involves four parcels of land interspersed by completed developments built by Ballymore. One site is centrally located within the LAP area, and is approximately 2 hectares, with the second three sites adjoining each other located on the western side of the LAP of 5.2 ha, and separted by two access roads running east west, one of which is open and in use. Some sites are currently hoarded. One site contains a large water retention feature designed as a series of interlinked descending small reservoirs.

The land parcels in question will present challenges from an urban design perspective due to their shape and the routes of services and roads already provided, particularly in accommodating development at a lower scale than previously proposed. They also are important for the LAP in that they frame the entrance to the LAP area from the east, and will frame the entrance to the new train station along the Royal Canal.

General Design Principles.

- Provide for a high quality urban edge built form on all sites addressing the main access road.
- Provide an attractive new public space to frame the access route to the train station, including a new pocket park with play equipment and community garden to the benefit of the new and existing housing and to provide a visual break and a green connection from Tolka Valley park to the Canal.
- Complete the tree lined boulevard route to the Ratoath Road junction from the community park and towpath and a second green link from the water feature to the community park.
- Provide for strong overlooking, appropriate heights and activity along the Canal towpath.
- Ensure that the entrance from Ratoath Road provides a high quality built form that balances with the existing completed development.
- For the 2 ha site layout, density and form should complement and integrate with the existing and proposed development to the east and west, and provide for an increased percentage of family housing, to balance up the existing mix of units.
- The plot containing the water retention feature will provide for overlooking of the feature to visually benefit from this green asset.
- Ensure that the building line and heights addressing Meridian Court adequately frame the road.
- Provide for housing to address the (old) Ratoath Road, providing activity in the cul-de-sac created by the new over bridge, and allowing for integration of the adjoining site (Campbell's Garage and associated property) if in the future it comes forward for redevelopment.

Phasing:

This holding is divided into three phases, shown in Figure 5.1.

Phase 1 shall provide for increased family-type housing units, forming an important link between two existing developed areas.

For site 1a, a 2 ha rectangular plot located between phase 1 & 2 of Castlethorn, and the existing Royal Canal Park, the development of this site will allow for the complete integration of the two sides of the LAP, provided both developments proceed. The site, at the most central location with the LAP and most removed from the station will provide housing at a slightly lower density than other locations, allowing for a greater percentage of family housing, to balance the high number of apartments provided to the east. Building heights will generally be between 2 to 4 storeys within the site, with the higher elements addressing Royal Canal Park to allow for integration between developments surrounding. Corner buildings can be up to 6 storeys. This phase will also deliver a key internal connecting road linking Phelan Avenue through towards Pelletstown House, increasing internal connectivity and providing an attractive walking and cycling route, which will connect Royal Canal Park more directly to the all weather pitch, the proposed primary school location, and access routes to Tolka Valley Park. Densities to be provided on this site will be generally be approximately 40-60 units per hectare.

Site 1b is the development area surrounding the water attenuation site. This site shall also provide for a larger proportion of family and larger housing styles, with frontage to both the road and the new park to be created using the attenuation feature. The site will provide for housing of an appropriate height (3+) on the southern part where it will be visible and provide overlooking to the towpath park. This phase shall deliver the new park, with an entrance and open aspect to the eastern boundary of the site, providing the opportunity for visual and biodiversity linkage between the Tolka valley and the Canal. Densities shall generally be within 50-70 units per hectare.

For this holding, Phases 2 and 3 can be interchanged, or sections of each completed in tandem, reflecting the mix of units and uses sought and the angular nature of the sites in question.

Phase 2- is an reverse "L" shaped site, of approximately 1.6 ha, and is transversed by a watermain, which will need to be protected from development. The site is bound by the Ratoath road to the east, the canal towpath to the south, and by a curving internal road, already complete, to the north and west. Critical to this site is the need to provide frontage development to the canal towpath and the Ratoath Road; as well as a high quality entrance to work well visually with the existing "gateway" style buildings into the LAP area.

In developing this site, the area south of the watermain can be treated as a separate development phase. For this part, the LAP seeks the provision of a mix of housing types, with a strong visual presence using height and design addressing the towpath and associated linear park (3-4 storeys). Housing should extend out onto the Ratoath road. At the western end of this site, a new public space to frame the access route to the new train station shall be provided to create a centring element to this part of the LAP. This space shall incorporate some urban space as part of the approach route for the station, adjoining a new pocket park providing play equipment and a community garden. An option as part of the development is providing a small retail/café element either within this site or Phase 3 addressing the new public space. Critical to the success in shaping this space is the building line and overlooking provided. Strong buildings lines, either terraces or blocks will be sought to frame the space. Due to the greater proximity of these lands to the new train station, densities sought will be in the order of 60+ units per hectare.

The northern portion of the site above the watermain is an important location as part the entrance to the LAP. This site has potential in the longer term to provide an attractive building complimenting the existing gateway buildings, with the possibility of higher density residential, mixed use or commercial uses, with the option of retail at ground floor level. Where this area of the site is not proceeded with in the short term, this site should be landscaped so that the entrance to the LAP area is attractive and inviting.

Phase 3 consists of a central block of land, framed by the developing road network. This site is best suited for residential use, with the option of some commercial retail uses on the north eastern quarter, and the possibility of café/shop near the train station to the south west. As a large site located close to the train station this site is appropriate for a slightly denser form of housing development, able to take and adequately respond to the frontage of Royal Canal Park phase 2 and provide housing addressing all boundary roads. Densities sought will be in the range of 60+ units per hectare. As a later phase of development, the landscaping or greening of this site with an attractive boundary treatment will be a requirement of the Council, or the use of this site for suitable short term uses such as temporary allotments. The retention of hoarding around the perimeter for this site will not be accepted.





5.2.4 "Ormond" Site

This site is a single plot, currently zoned Z6 in the City Development Plan, extending over 1.4 ha. The site is not in use at present and contains an existing light industry single storey building and surface car park. The site has extensive road frontage on the existing Ratoath road approach to Reillys bridge; and will be bounded in the future to the east by the new Ratoath road over bridge. No phasing is proposed for this landholding due to it being one single plot.

General Design Principles.

- Seek development with a mixed use character, reflecting the site's role on the boundary between to larger land use types, with housing and commercial uses provided.
- Provide good active and attractive frontage onto old Ratoath road (following completion of overpass) with a number of entrances to premises and residential units directly from the road to create activity on this new cul-de-sac.
- Layout and design of buildings facing the junction to complement the existing buildings to the west, helping to frame the entrance road into the LAP area.
- Height can be accommodated within the site to avoid the over bridge dominating the site.
- In the redevelopment of this site, an Environmental Management Plan should be drawn up, taking into account any potential on-site contaminated soils which may be identified

As an enterprise zoned site, the long term aim is for this is land to be developed for a mix of business and residential uses at medium densities, capitalising on the high level of connectivity available by the completion of Luas to Broombridge, giving this site strong accessibility by both Luas and heavy rail. As an edge zoning it is considered that the site can and should accommodate an element of mixed use, with some residential, and/or livework units provided, and also limited retail (focussed on the northern part of the site, integrating with the existing "village centre" at Royal Canal park), incorporated into buildings rising 4-6 storeys.

In the short term, to encourage economic activity on the site, the potential of this site to develop as an enterprise centre using the existing buildings is recognised. As a large site there is scope to expand with additional structures; providing start up spaces for new business.

Table 5.1 Infrastructure required in relation to each phase

Landholding	Phase	Description	Required Infrastructure
Capel	Phase 1	Housing	Frontage to road network
	Phase 2	Housing	Canal towpath and linear park provided
	Phase 3	Housing	Green link and park connecting to towpath
Castlethorn	Phase 1	Housing	All weather pitches completed, link road east west opened, and route up to school site, pocket park
	Phase 2	Housing	Crescent completed, 2 nd pocket park.
	Phase 3	Housing	Completion of road and footpath network surrounding site
Ballymore	Phase 1	Housing	Link road between Castlethorn phase 1 and Phelan Ave opened, new biodiversity park at attenuation ponds.
	Phase 2	Housing & mixed use	Linear park on towpath, new community park
	Phase 3	Housing	Green link between canal and biodiversity park, and boulevard to Ratoath Road entrance

5.3 Short Term Priorities

During the consultation process for preparing this LAP, the issue of immediate and/or temporary actions to improve the quality of the local environment within the LAP area was consistently raised. Whilst the LAP sets out a strategy for completion of the various sites and a phasing plan for each major landholding, the timeline to full completion of all sites is significant and likely to extend beyond the life of the LAP. In recognition of this challenge, the LAP seeks to set out a number of interim priorities and priorities that impact on the phasing plan for the LAP area.

The priorities identified for phasing for the LAP are:-

- 1- Improved connectivity by completing key roads within the LAP
- 2- Improvement works to sites identified as later phases including removal of deteriorating hoardings and replacement with fencing, and tidying up of sites to visually improve the area and discourage anti-social behaviour.
- 3- Increased levels of activity and supervision of canal towpath and completion of lighting and appropriate landscaping to improve safety
- 4- Need to provide in early phases for increased percentage of family housing to encourage greater mix and stability within the LAP area.

Temporary Uses

Due to the current economic climate it is likely that later phases within the LAP area that are currently vacant may remain so in the short and medium term. Dublin City Council will adopt a dual approach of (1) ensuring vacant sites are managed properly so that sites are kept clear of debris, buildings secured and boundary treatments are attractive and maintained and (2) encourage temporary uses on these sites to bring activity and vitality to the area.

Temporary uses on vacant sites may include:

- Temporary school or other community structures
- 'Greening' to create a temporary park or biodiversity space
- Landscape screening and attractive railing/fencing to reduce negative visual impacts of vacant sites/rear elevations/exposed boundary walls
- Use of space for local events, projects or festivals
- Allotments or community gardens
- Start up business/innovation activities (where there is no detrimental impact on adjoining properties)
- Limited surface parking until sites are redeveloped
- Visual arts projects which enliven the public realm.

Possible Constraints to Development

The implementation of this Local Area Plan may be constrained by a number of elements. The most significant of these are the current economic climate and housing market, the business status of the landowners, possible changes of ownership as well as the delivery of key infrastructure by State agencies and Dublin City Council. The nature of local area plans is that they have no individual budget to deliver objectives and are dependent on delivery by a range of private and public bodies.

Key infrastructure identified in this LAP as essential to the success of the areas is the development and operation of the new train station and the development of a new primary school. Dublin City Council has been directly involved in seeking the delivery of the train station, and it is anticipated this will be completed either prior to or in tandem with phase 1 of development. However the funding and construction of the primary school is wholly the responsibility of the Department of Education & Skills.



The Council will actively work with the Department of Education & Skills and all other agencies to seek the delivery of key objectives of the LAP, including particularly the school.

Other agencies that will be targeted, to achieve full implementation of the LAP include, inter alia, the National Transport Authority, Department of Environment, Community and Local Government, Department of Transport, Irish Waterways and Irish Rail.

Development in the LAP lands is dependent on capacity being available in the Ringsend Wastewater Treatment Plant. Development can and will only be permitted in tandem with available water supply, waste water treatment and network capacity.



5.4 Implementation & Monitoring

Construction

Dublin City Council recognises the negative impacts, albeit short term, that large scale construction projects can have on local communities and businesses, in terms of dust, noise and other nuisances. All major planning applications will be required to be accompanied by a construction management plan to mitigate against adverse impacts on the local residents and businesses.

Taking in Charge

Dublin City Council is committed to taking in charge the public areas of new developments, including where appropriate, community and recreational facilities. In this regard clarity should be provided in applications for residential development regarding the extent and scale of management companies and the extent of areas to be taken in charge or not. Applicants should refer to Guidelines for Open Space Development and Taking in Charge (Parks & Landscape Services Division) 2009 and relevant taking in charge standards of both Roads & Traffic and Drainage Divisions of the Council. In relation to residential development, Dublin City Councils 'Policy for the taking in charge of Residential Developments' (2012) shall apply, and it should be noted that this updates Appendix 26 of the city development plan.

Monitoring & Review

The Ashtown Pelletstown LAP will have effect for a period of six years in accordance with the Planning & Development Acts 2000-2010. Thereafter the LAP may be reviewed or extended by resolution of the members of the City Council.

It is the role of Dublin City Council to put in place a structure for the continual monitoring and progress review of the LAP and its objectives.

In order to ensure that the development strategy outlined in this LAP is being delivered, Dublin City Council will, through its development management functions, monitor the implementation and phasing of this LAP. A midterm review report of the LAP will be prepared to assess whether the objectives of the LAP are being met. The report will also provide updates on the monitoring programme as set out in Section 9 of the Environmental Report.

Levies

All development proposals within the LAP area are subject to general financial contribution levies as set out under the Dublin City Councils Development Contribution Scheme made under Section 48 of the Planning and Development Acts. These levies will contribute towards expenditure by Dublin City Council for works including road and transport projects, water and drainage schemes, open space, recreation, culture and arts projects and other amenities that facilitate and support development.





Appendices



Appendix 1: Flood Risk Assessment

Section 1: Flood Risk Identification

Introduction

This Flood Risk Assessment was prepared and informed by the DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW, 2009) on 'The Planning System and Flood Risk Management' (and Technical Appendices). The Guidelines state that planning authorities are requested to introduce flood risk assessment as an integral and leading element of their development plan functions. It sets out that development plans and local area plans, must establish the flood risk assessment requirements for their functional area.

A Strategic Flood Risk Assessment (SFRA) is an area wide assessment of the existing risks of flooding and the impact on those risks arising from proposed spatial planning decisions.

A staged approach was adopted in the preparation of this FRA. The Stage 1 approach has identified that the area is at risk of flooding, and the principle sources of flooding identified are pluvial and fluvial flooding. The Stage 2 Flood Risk Assessment will confirm sources of flooding that affect the plan area, and will involve the preparation of a flood zone map, based on best available information. This assessment will also detail flood management strategy for the plan area. Where a detailed Flood Risk Assessment is required to assess flood risk areas in sufficient detail and to provide quantitative appraisal of potential flood risk to a proposed or existing development a stage 3 flood risk assessment will be carried out.

The guidelines require the planning system at national, regional and local levels to:

- a) Avoid developments in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere.
- b) Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance. reduction and mitigation of flood risk, and incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals
- c) Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

Brief Description of the Plan Area

The plan area (see Figure 1) is located approximately 4km north west of Dublin City and 2km from Finglas and Cabra, at a location where the City (Dublin) and County (Fingal) boundaries meet. These lands at Ashtown/ Pelletstown which measure approximately 67 hectares are located at the north-western boundary of the Dublin City Councils functional area.

positioned immediately to the north of the suburb of Ashtown, east of Castleknock, and south of Finglas. The southern boundary is formed by the Royal Canal and railway line, which separates it from the Ashtown/Cabra residential areas, and the eastern and western boundaries are delineated by the Rathoath and Ashtown roads respectively. The selected eastern boundary rather than following the existing road route follows the route of the proposed realigned Ratoath Road - which is positioned east of the existing road. The northern boundary is formed by the River Tolka which is positioned within Tolka Valley Park at the boundary with Fingal County Councils administrative area.

The site is distinguished by the fact that it is located between two natural amenity areas, Tolka Valley Park, which is undergoing improvement works at present, and the Royal Canal on the southern side, which is a proposed Natural Heritage Area. Road access to the subject lands is generally from the N3 Dublin-Cavan National Primary route, positioned to the south, as well as from the more local road network comprising the Rathoath Road, Ballyboggan Road, Ashtown Road and River Road. The existing Ashtown rail station is located immediately south of the south-western corner of the plan area.

The Plan area is located within the Eastern River Basin District (ERBD) in Hydrometric Area 09. The Plan area is located in the Tolka Water Management Unit (WMU) in the Eastern River Basin District.

The River Basin Management Plan can be downloaded from the Water Framework Directive website www.wfdireland.ie. A WMU is a geographic area primarily defined by similar hydrology and topography. These groups of river and non-reportable lakes had been created so that multiple river segments or water bodies can be treated as one management unit. For coastal, transitional, groundwater and reportable lakes, a WMU represents a single water body.

The River Tolka flows through the study area through Scribblestown Bridge which acts as a hydraulic restriction during extreme flood events, causing the river to overtop Scribblestown Road. The river then proceeds through the study area north of River Road and is fed by Scribblestown Stream approximately 670m downstream of Scribblestown Bridge. At the eastern end of the plan area, the River discharges through Cardiff's Bridge. This bridge is also overtopped during extreme flood events.

The River Status in the Tolka Lower when it enters Dublin City is classified as 'Poor' in the Eastern River Basin District (ERDB). The main problems identified in this WMU are high nutrients (phosphorous and ammonia). oxygen demand, low ecological rating, and a heavily modified channel. In the Tolka catchment the principle pressures in the upper catchments are from agriculture and wastewater and industrial discharge.





