



Planning and Development

OF LARGE-SCALE, RAIL FOCUSED RESIDENTIAL AREAS
IN DUBLIN



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Executive Summary



THE CHALLENGE

The purpose of this study is to assess the future delivery of rail-based large and medium scale residential development areas in Dublin¹, given the current economic and funding conditions prevailing in Ireland, and the current lack of new residential development delivery of any scale. For clarification, this study does not have any statutory basis. The purpose of this study is to inform policy in this area. The challenge for this study is:

- To examine current issues arising in relation to large and medium scale residential development areas due to the noted pressure to deliver development at densities lower than those set out in the planning frameworks, largely driven by perceived market trends and funding issues; and
- To identify potential approaches that provide viable solutions to addressing these issues.

STRATEGIC OBJECTIVE

Government policy in urban areas has been to increase sustainability and efficiency through greater alignment of land use and transport. In relation to residential development, this policy seeks to increase residential densities in areas proximate to public transport corridors. In the Dublin area, a number of large and medium scale residential development areas on rail-based public transport corridors were identified for delivery of sustainable neighbourhoods. These areas are planned to achieve (net) densities² in excess of 50 units per hectare, as identified as being appropriate for development along public transport corridors in 'Sustainable Residential Development in Urban Areas' (DoECLG May 2009).

In direct response to the challenge as set out, and acknowledging Government policy in relation to sustainable residential development, the strategic objective of this study is to propose how best, given current economic circumstances, to deliver residential development in rail-based large and medium scale residential development areas without compromising the longer term population densities that are necessary to sustain viable rail based public transport provision. Such arrangements have to be delivered while retaining the quality of the living environment, ensuring consistency with Government policy and protecting public investment in public transport.

¹ The study relates to Dublin, as defined by the functional areas of Dublin City Council, South Dublin County Council, Dún Laoghaire Rathdown County Council and Fingal County Council.

² Note: All references to density throughout this study refer to net densities

STUDY APPROACH

The study comprises 4 broad stages:

1. Assessment of the current situation and trends in Dublin in relation to large-scale residential development delivery;
2. Key principles of high density schemes including case studies analysis;
3. Delivery & design considerations to achieving residential development in the current economic circumstances; and
4. Proof of Concept Analysis applied to one area.

PROPOSED APPROACH TO RESIDENTIAL DELIVERY

Given the range of issues which can impact on residential delivery, an approach which addresses all these factors is proposed in this study. The 'Kickstart' Incremental Development Approach is recommended which can be adapted for application to a range of strategic residentially zoned lands. It essentially comprises a plan-led³ approach to the development of the Strategic Residential Development Areas in a manner that:

- Allows for initial development at a lower density;
- Leverages the use of existing infrastructure;
- Provides for investment in necessary early infrastructure while seeking to minimise early infrastructure costs;
- Promotes the enhancement of the environs of each phase; and
- Achieves the overall target density in a phased manner.

In applying the Kickstart Incremental Development Approach, the overall objectives which need to be achieved are:

- Seek short term and immediate intervention in housing delivery in strategic residential development areas;
- Deliver a phased and incremental development strategy linked to overall density target delivery; and
- Secure the incremental increase in density as part of a managed approach to the area's development strategy.

Key identifying elements of the Kickstart Incremental Development Approach are:

- Identification of a 'kickstart' location on designated lands;
- Flexibility in the lower density range with traditional housing typologies to facilitate marketability of early development;

³ This study is primarily aimed at planning schemes, such as Local Area Plans and Strategic Development Zones.

- Increase density incrementally to achieve overall density targets;
- Retain key high density locations for later development phases;
- Retain policy in relation to sustainable residential communities;
- Seek mixed densities through an area, securing a mix of housing typologies, and facilitating a mix of tenures, through each stage of development;
- Secure quality of development through all stages;
- Managed key connections to existing hubs (transport, educational, commercial etc.);
- Managed approach to delivery of the overall development including vacant lands; and
- Develop the ‘kickstart’ model as an intrinsic element of an overall managed plan for delivery of the Strategic Residential Development Areas. The ‘kickstart’ model will inform the early stages of the plan’s delivery, allowing flexibility of approach. However, the ultimate objectives and target densities must be achieved in the roll-out of the plan. In addition, the existence of an overall plan will mitigate against the risk of opposition from early occupiers to later phases of development.

KEY CONCLUSIONS OF THE STUDY

Stemming from the research, analysis, and assessment of approaches worked through in this study, the following key conclusions have emerged:

- Government policy in relation to sustainable residential density guidelines remains applicable;
- Government / public sector intervention is required to ‘show confidence’ in the delivery of strategic residential locations; and
- Flexibility in minimum densities should be considered subject to agreements being put in place to meet overall density targets.

It is considered that for Dublin to continue to grow, improve its economic status, and function as economic driver for the country that a coordinated and integrated approach to land use and transport planning must continue to be implemented through national policy.

The significant level of public investment in the strategic residential locations identified in this study, warrants a continued and consistent approach to securing higher density housing delivery at these locations and ensuring optimisation of valuable land banks and public investment in infrastructure. Public sector involvement would assert confidence in these strategic residential locations and enhance desirability in the market.

Within this context, the study concludes that in order to promote and catalyse residential development in locations where public investment has been most

intense, then a certain flexibility in the density range of development needs to be introduced in the early stages of delivery. It is critical that this flexibility be conditional on securing higher densities over the entire development area over time, ultimately achieving density targets under the planning framework in place.

Prioritisation of strategic residential locations

In order to secure delivery of housing areas where significant public investment has been made, there is a requirement for active public sector coordination to ensure the continued prioritisation of these areas for housing development. This requires:

- Coordinated government / public strategy (i.e. direct action and investment) with departments cooperating to deliver required interventions to support the delivery of the strategic residential development areas; and
- Prioritisation of locations that are considered most appropriate for development delivery in the short term.

Proposed Delivery Framework - Kickstart Incremental Development Approach

This study proposed proposes a delivery framework to implement the Kickstart Incremental Development Approach for strategic residential development areas in Dublin, including:

1. Continued application of public policy in relation to Sustainable Residential Development standards;
2. Flexibility in minimum densities to be considered in early stage development, subject to agreements being put in place to meet overall density targets;
3. Optimisation of existing infrastructure investment where possible;
4. Provide for identified upfront public funding and required critical infrastructure to achieve development in key locations, while ensuring quality of delivery;
5. Achieve a legal/ contractual agreement between private (landholders / developers) and public interests (Local Authority / Government agencies) in respect of development delivery, sitting within the existing planning framework;
6. A ‘package of measures’ or programme of targeted investment is recommended to be effected by the public sector; and
7. Management of the delivery process through the Local Authority in a similar manner to the delivery of an SDZ through a Development Agency.

The delivery framework developed as part of this approach, requires further assessment for implementation, and should be transparent in its intentions and applicability.



1. Strategic Overview

1.1 THE CHALLENGE

The purpose of this study is to assess the future delivery of rail-based large and medium scale residential development areas in Dublin, given the current economic and funding conditions prevailing in Ireland, and the current lack of new residential development delivery of any scale due to the noted pressure to deliver development at densities lower than those set out in the planning frameworks, largely driven by perceived market trends and funding issues. For clarification, this study does not have any statutory basis. The purpose of this study is to inform policy in this area. The challenge for this study is:

- To examine current issues arising in relation to large and medium scale residential development areas; and
- To identify potential approaches that provide viable solutions to addressing these issues.



1.2 STRATEGIC OBJECTIVE

Government policy seeks to increase sustainability and efficiency in urban areas through greater alignment of land use and transport. In relation to residential development, this policy seeks to increase residential densities in areas proximate to public transport corridors. In the Dublin area, a number of large and medium scale residential development areas on rail-based public transport corridors were identified for the purposes of this study for delivery of sustainable neighbourhoods. These areas are planned to achieve (net) densities in excess of 50 units per hectare, as identified as being appropriate for development along public transport corridors in 'Sustainable Residential Development in Urban Areas' (DoECLG May 2009)¹. See Appendix A for details.

In responding to the challenge set out, the following considerations are of relevance:

- Requirement to achieve Government policy in relation to an integrated approach to land use and transport (specifically as set out in the Regional Planning Guidelines for the Greater Dublin Area, Sustainable Residential Development in Urban Areas, and in the NTA's draft Transport Strategy, as well as in development plans and plans at the local level);
- Necessity to protect public investment in public transportation at key locations;
- Need to deliver density of population required to make viable rail-based public transport provision. Investment in high quality public transport has to be made economically justifiable, and this can only occur with a sufficient critical mass of development, either existing or envisaged to exist in the future. If that delivery of critical mass is compromised, it may not be economically feasible to support such areas with the provision of high quality public transport, thus compromising policy on public transport focussed development. This critical mass of development applies both to areas for employment development and to residential development locations.

In direct response to the challenge as set out, and acknowledging Government policy in relation to sustainable residential development, the strategic objective of this study is to propose how best, given current economic circumstances, to deliver residential development in rail-based large and medium scale residential development areas without compromising the longer term population densities that are necessary to sustain viable rail based public transport provision. Such arrangements have to be delivered while retaining the quality of the living environment, ensuring consistency with Government policy and protecting public investment in public transport.

¹This study is primarily aimed at planning schemes, such as Local Area Plans and Strategic Development Zones.

1.3 DEFINITION OF TERMS

Scope of Study

The study relates to Dublin, as defined by the functional areas of Dublin City Council, South Dublin County Council, Dún Laoghaire Rathdown County Council and Fingal County Council.

The study relates to lands identified for large-scale residential development at a density in excess of 50 units per hectare, as identified as being appropriate for net development, along public transport corridors in ‘Sustainable Residential Development in Urban Areas’ (May 2009). Therefore, references in this report to ‘large-scale residential development areas’ or to ‘strategic residential development areas’ refer to areas designated for residential development of 50+ units per hectare, located on a rail line (including heavy rail, DART, LUAS) within the four Dublin local authority areas.

Note: All references to density throughout this study refer to net density.

A set of criteria or common attributes was formulated to aid in the process of identifying what have been termed the Strategic Residential Development Areas within the four Dublin local authorities, and are the subject of this study.

Such areas:

- Are located within the four Dublin local authority areas;
- Are served by high quality public transport (heavy rail, DART or LUAS);
- Have the ability to accommodate significant future population growth;
- Have been designated under their respective governing statutory plans as areas suitable for residential development at a density in excess of 50 units per hectare;
- Constitute strategic land banks which are currently designated for large-scale primarily residential development and which are appropriately zoned or designated SDZ or LAP areas;
- Can be greenfield / brownfield sites;
- Are generally not located in existing towns; and
- Have not to date been completely built out.

Therefore, using the criteria above, the following lands were designated as Strategic Residential Development Areas and selected for further detailed analysis:

Fingal	Dublin City	South Dublin	Dún Laoghaire Rathdown
Hansfield/Barnhill	Clongriffin/Belmayne	Adamstown	Sandyford
Portmarnock South*	Ballymun** Pelletstown	Clonburris	Stepaside Cherrywood
Baldoyle / Stapolin	Park West / Cherry Orchard		
Phoenix Park Racecourse	Naas Road Lands		

Table 1.3.1: Strategic Residential Development Areas

** Note on Portmarnock South (exception here regarding density targets)*

Portmarnock South lies within the Dublin Airport outer public safety zones, and the LAP 2006 is influenced by the Report on Public Safety Zones (2005) which recommends that “no single half hectare plot should accommodate more than 60 persons”. This is assessed at approximately 40 units per hectare assuming 3 persons per unit on average, although the occupancy may fluctuate depending on the size of the units.

*** Note on Ballymun (exception here regarding location on rail line)*

Ballymun is included in this study due to the scale of the regeneration programme underway there. Metro North was programmed to be delivered through Ballymun, but is now postponed.

Other Residentially Zoned Lands

Particular focus is being placed in this study on these large-scale development areas due to:

- Significant public investment infrastructure to date, including in rail transport; and
- Potential to accommodate significant populations.

It is not anticipated that residential development will exclusively be concentrated in the large-scale development areas. It is envisaged that other infill development areas and lands served by other forms of public transport are suitable for residential development, and for the purposes of this study are termed ‘other residentially zoned lands’.





Figure 1.3.1: Strategic Residential Development Areas

Dublin City Centre

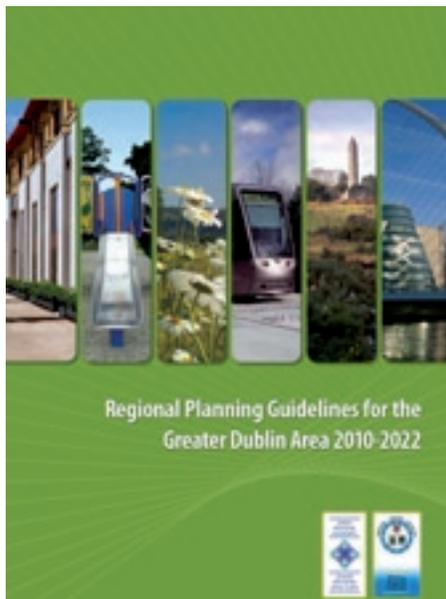
It should be noted that there are substantial development areas in Dublin City Centre that are recognised as important development zones, are suitable for immediate residential development, and for development consolidation. These areas have not been included for consideration as part of this study due to the following differentiating factors, however this in no way impacts on the ability of these lands to be progressed for development:

- Higher densities apply to the city centre area than to areas beyond the city centre;
- Level of public transport provision generally exceeds that of other city locations (the city centre is the location best connected by public transport in the region);
- The City Centre is a key employment location, which entails wholly different development considerations to residential locations; and
- Mixed use is a key feature of city centre development. This study mainly pertains to areas dominated by residential zoning with some ancillary mixed use. This is not the case of the city centre where a mixed use zoning dominates.

Limitations

- This study is focused on the four Dublin Local Authority areas as noted above. However, the principles and findings may be applicable elsewhere, subject to further assessment for applicability.
- The study is, for the most part, concerned with physical planning responses to the challenge as set out. It is acknowledged that physical planning interventions must be complemented by a suite of corresponding measures addressing other issues, including the availability of finance, changes in the relevant regulations, coordination of infrastructure delivery and planning, and in the level and requirement of development contributions. This report should therefore be read in the context of these wider considerations, as part of a response to a very complex situation for which there is no simple solution.

2. Planning and Transport Policy



2.1 LAND USE AND TRANSPORT POLICY FRAMEWORK

The planning of residential areas is governed by a suite of legislation and planning policy guidance that has been expanded, clarified and refined over time. The objective for residential development is the delivery of high quality places to live. The range of relevant national policies can be distilled into a series of high-level aims for successful and sustainable residential development in urban areas, as follows:

- *Prioritise walking, cycling and public transport, and minimise the need to use cars;*
- *Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience;*
- *Provide a good range of community and support facilities, where and when they are needed and that are easily accessible;*
- *Present an attractive, well-maintained appearance, with a distinct sense of place and a quality public realm that is easily maintained;*
- *Are easy to access for all and to find one's way around;*
- *Promote the efficient use of land and of energy, and minimise greenhouse gas emissions;*
- *Provide a mix of land uses to minimise transport demand;*
- *Promote social integration and provide accommodation for a diverse range of household types and age groups;*
- *Enhance and protect green infrastructure and biodiversity; and*
- *Enhance and protect the built and natural heritage.*

(Sustainable Residential Development in Urban Areas, p5)

These principles are common to all forms of residential development. Of most importance and relevance to this study is planning and transport policy and practice as it relates to:

- Residential density; and
- Integration with high-quality public transport.

2.2 DEVELOPMENT OF STATUTORY PLANNING AND TRANSPORT POLICY IN IRELAND

The benefits of closer integration between transport policy and land-use policy and density standards have been long recognised but only received a statutory basis in 1999 with the publication of the 1999 Residential Density Guidelines by the Minister for the Environment and Local Government.

The National Spatial Strategy 2002-2020 (2002) established a detailed sustainable development framework for strategic spatial planning, particularly with regard to the location of new housing in urban areas, including the objectives of:

- Maximising access to and encouraging use of public transport, cycling and walking; and
- Developing sustainable urban and rural settlement patterns and communities to reduce distance from employment, services and leisure facilities and to make better use of existing and future investments in public services, including public transport. (NSS, p13)

It set out a framework for deciding on the most appropriate locations, and placed emphasis on principles such as:

- Concentration of development in locations where it is possible to integrate employment, community services, retailing and public transport; and
- Mixed-use and well-designed higher density development, particularly near town centres and public transport nodes like railway stations. (NSS, p103)

The Planning and Development Act 2000 gave strong statutory footing to a range of measures that facilitated a stronger connection between transport and land-use policy. The Act gave statutory recognition to the concept of sustainable development and illustrates a variety of practical methods of implementing sustainability, such as promoting sustainable settlement and transportation strategies.

The Act set a requirement for the development of *Regional Planning Guidelines* to promote co-ordinated cross boundary planning strategies. The current *Regional Planning Guidelines for the Greater Dublin Area* date from 2010. Statutory plans for the counties of the Greater Dublin Area required to be consistent with these guidelines.

2

The Act also set the legislative framework for the creation of Strategic Development Zones. This mechanism has been used to set the policy framework for a number of major new residential areas within the Greater Dublin Area. The development framework and phasing of delivery has seen close collaboration between planning authorities, state agencies, government departments and communities. The intention has been to co-ordinate the delivery of infrastructure (including transport infrastructure) with the delivery of residential units.

Sustainable Residential Development in Urban Areas, Guidelines for Planning Authorities, was issued by the Department of the Environment, Heritage and Local Government in May 2009. It forms the principal policy document guiding the design and layout of residential schemes in Ireland. The guidelines supersede the 1999 Residential Density Guidelines.

The guidelines emphasise a phased and sequential approach to the zoning and development of land for development, the availability of public transport and the setting of appropriate density levels for developing areas.

The emphasis in the Guidelines is on the delivery of well-designed attractive homes and the quality of the environment created. Subject to appropriate standards and conditions being attained, the document specifies locations where increased density may be appropriate, such as along public transport corridors where minimum net densities of 50 dwellings per hectare should generally be applied. See *Appendix A for details*.

Smarter Travel – A Sustainable Transport Future 2009 is the national policy document setting out a broad vision for future transport in Ireland. The aim is that by 2020 future population and economic growth will have to predominantly take place in sustainable compact urban and rural areas which discourage dispersed development and long commuting.

Smarter Travel finds that infrastructure development alone will not be enough to address the unsustainable trends in transport. The document sets objectives to change mind-sets, and alter travel behaviour, requiring the alignment of policies across Government.

Pivotal to altering travel behaviour is the need to improve the alignment of spatial and transport planning, stopping urban sprawl and urban-generated one-off housing in rural areas. It also identifies a need to introduce carefully targeted fiscal measures to discourage unnecessary use of the car.

The Draft *Greater Dublin Area Draft Transport Strategy - 2011-2030* (2011) seeks to establish appropriate policies and transport measures to meet national objectives in respect of the economy, society and the environment. In relation to land use policy, the draft strategy, consistent with the Regional Planning Guidelines, sets out measures to consolidate development and minimise sprawl through a process of development consolidation and the promotion of an appropriate mix of land uses within areas that bring people closer to their needs and allow a high emphasis on walking, cycling and public transport.

The draft Strategy promotes higher development densities in designated areas, where public transport accessibility is good. In addition, intensive development should also take place in areas well served by rail, whether heavy, medium or light rail. It promotes that development should take place at these locations in advance of other locations.

Legislative changes since 2008 have given a more central role for land use and transport integration in the planning process, requiring development plans to be consistent with the objectives of Regional Planning Guidelines and the National Spatial Strategy and requiring development plans to be consistent with the Transport Strategy for the Greater Dublin Area.

These incremental changes in approach bring transport policy to the centre of planning policy formulation within the Dublin Region. The Transport Strategy, when adopted, will be a significant part of the framework that will guide, in conjunction with the Regional Planning Guidelines, future land-use and settlement policy in the region. The Planning Guidelines on Sustainable Residential Development provide supporting policy in ensuring the quality of the constructed development will meet best practice standards across all planning criteria.



LUAS Red line



Docklands Rail Station



Kildare Route project



Figure 2.3.1: Existing Rail Based Public Transport Infrastructure

2.3 INVESTMENT IN PUBLIC TRANSPORT

There has been very substantial investment in transport throughout the State over the last decade. While the predominant portion of that overall investment has been focussed on the road network, there has, nevertheless, been significant investment in public transport, particularly in the Dublin region.

This has included the delivery of new lines and services (see Figure 2.3.1):

- The Luas Red line (and extensions);
- The Luas Green line (and extensions);
- The Kildare Route project;
- Dunboyne rail scheme; and
- Bus infrastructure, including bus priority measures, waiting facilities and improved travel information.

In addition, that investment has provided improvements to rolling stock, signalling and tracks along existing routes, facilitating improved levels of service, quality and frequency.

2

The Greater Dublin Area Draft Transport Strategy identifies a series of proposed new pieces of rail infrastructure to serve the Dublin Region. These new projects are also supported by the Regional Planning Guidelines for the Greater Dublin Area, and include the following (as shown in Figure 2.3.2):

- Dart Underground;
- Luas Cross City;
- Metro North;
- Metro West;
- Lucan Luas;
- Luas extension to Bray; and
- Potential Luas or BRT to Tallaght (via Kimmage).

Ireland's economic circumstances mean that many of these projects will not progress in the short term. However, investment in public transport has continued with Luas Cross City currently being constructed. Improved service on existing routes and fleet renewal is also proposed in the draft Transport Strategy.

Improved service on existing routes and fleet renewal is also proposed. In addition, improvements in bus transport are also proposed, including the improvement of Quality Bus Corridors and the transitioning of certain corridors to Bus Rapid Transit operation.

The delivery of public transport services to date, in addition to proposed new projects, emphasise the importance of the connection between land use and transportation planning for both residential development and for employment and labour mobility.



Figure 2.3.2: Planned Rail Based Infrastructure (Greater Dublin Area Draft Transport Strategy - 2030 Vision, National Transport Authority)

3. Residential Delivery to Date



Figure 3.1.1: Strategic Residential Development Areas

INTRODUCTION

As outlined in Chapter 1 of this study, government policy has sought to achieve the delivery of sustainable residential neighbourhoods on rail-based public transport corridors in the Dublin area. The unexpected downturn in the economy has had profound effects on this policy delivery. The following issues are of particular concern:

3.1 ISSUES

- The rate of economic growth has declined dramatically impacting on the rate of population growth and the demand for new residential units;
- Simultaneously, the extent of residentially zoned land nationally (with the exception of urban areas) remains high and, in some locations, in excess of that required to meet demand in the foreseeable future;
- Wide-scale application of lower residential densities (than promoted in government policy relating to public transport corridors) could undermine the development required for provision of good public transport and put at risk integrated land use and transport objectives of the Regional Planning Guidelines and the NTA draft Transport Strategy, and County Development Plans;
- The expected return on some recent investment in public transport infrastructure has not been fully realised because projected supporting development has not proceeded and employment levels have fallen, with a consequent reduction in commuting to work. Moreover, the lack of development threatens the viability of other planned and projected transport investment that is essential for the achievement of an overall integrated public transport system and a well planned Dublin city region;
- The relatively greater collapse in demand by private purchasers for apartment units has significant implications for development in the vicinity of public transport nodes, where the highest densities are justified and are required to support transport investment. It is not yet clear if currently perceived changes in market demand towards individual own-door units, will continue into the future or whether market sentiment will revert to a more balanced pattern in due course;
- Marketability of higher density residential locations is a consideration in the current market which has swung towards a more conservative demand for traditional style housing, in relation to initial funding ability, in addition to value retention on the asset;
- The delivery of housing units and in particular the mix of units, at least in the short to medium term, is affected not only by real and perceived market demand but also by the availability of finance to both buyers and builders;

3

- Funding restrictions exist on residential development generally, but particularly for larger scale developments. This is due to the relatively high up-front cost of delivering large-scale developments, and increased risk exposure;
- Development funding uncertainty impacts on security of delivery for a large-scale development;
- Mobility in the housing market is limited due to negative equity and lack of funding;
- Optimisation of infrastructure investment delivered to date (beyond transportation investment) is threatened;
- The extent of existing planning permissions sitting in the system which may or may not be deliverable, could hamper future public or private proposals;
- Development costs are largely not being met by market prices in the current market;
- Relative attractiveness for development of locations which provide for lower density residential delivery in addition to lower upfront infrastructure / contribution costs; and
- Failure to deliver family accommodation in the Metropolitan area would lead to more families being displaced to more peripheral locations.

3.2 KEY CONSIDERATIONS

3.2.1 Policy

Increasing sustainability and efficiency through greater alignment of land use and transport was a central objective underpinning the Regional Planning Guidelines. The Guidelines seek to concentrate new development into designated centres that are well-served by public transport, at densities appropriate to such locations and incorporating a mix of uses and services. In turn, the objective has been incorporated into all relevant development plans of recent years.

This strategic objective has also been endorsed by national government through legislation, regulations and guidelines, such as those relating to sustainable residential development in urban areas, as well as through direct investment in infrastructure.

The realisation of the objective will result in much improved and more coherent residential development, well served by high-quality, high-capacity public transport and incorporating a full range of services, including schools, parks and shopping, within a relatively compact area. In turn, this will improve the attractiveness and quality of urban living, and significantly reduce congestion and urban sprawl, therefore increasing efficiencies across the urban system. Although the benefits of this approach have not yet been fully realised, these were already

clearly evident in a number of respects and at a number of locations before the commencement of the current economic downturn.

In particular, the strategic approach of aligning land use and transport requires intensive investment in public transport infrastructure. The investment in such infrastructure in the past 15 years, especially in the Dublin area, is predicated on a corresponding realisation of residential and other development at appropriate scales and densities and at the right location. Failure to deliver this development may impact on the future delivery of planned public transport infrastructure.

3.2.2 Increased Densities in Residential Development

Delivery of housing in Ireland has, until recently, largely focussed on lower density residential development models, typically comprising areas of detached or semi-detached houses. While there have been some exceptions to this low density model, increased densities in residential development has largely only been a feature of housing delivery in Ireland over the past ten years. As highlighted above, government policy has sought to more fully align public transport investment with residential development, in effect to optimise the synergy between land use and transport planning, and resolve the economic implications of continued urban sprawl beyond the Dublin area.

Benefits of this policy can be felt, not only at the national government level, but also at the user level, where enhanced facilities can be delivered to a higher population which is more concentrated in a given location. These benefits can be summed up as:

- Higher density of population can support the delivery of key social, community and commercial services;
- Co-location of land uses (education, leisure, residential, working, social, commercial, retail) reduces the need to travel;
- Optimisation of public investment in infrastructure provision – transport, water, waste, energy, and so on – leads to better services provision overall;
- Reduced congestion resulting from a more compact urban pattern results in efficiencies in time and money, and creates an improved living environment (fewer carbon emissions);
- Improved public transport provision leading to a more equitable urban system for all citizens;
- Ability to integrate a variety of unit types and tenures into a development, therefore providing the ability for life-long living in a location; and
- Provides a more balanced demographic in an area, ultimately supporting services for a longer period and therefore achieving sustainable development over the long term.





3.2.3 Demographic Changes

Changing demographics such as changing household sizes, household formation rates, urbanisation trends, and so on, cannot be ignored in planning for future housing.

Significant increase in rented accommodation

According to the most recent 2011 Census figures, the number of households in rented accommodation increased by 47 per cent to 474,788, up from 323,007 in 2006. The overall percentage of households renting their accommodation rose to 29 per cent causing home ownership rates to fall sharply from 74.7 per cent in 2006 to 69.7 per cent in 2011, falling below the EU average for home ownership (73.5%) for the first time.

Strong growth in apartments

The increase in apartments as an accommodation type in Ireland continued between 2006 and 2011 with 177,587 occupied apartments in 2011, an increase of 27 per cent on the 2006 figure of 139,872. Apartments comprised 10.9 per cent of all occupied households in 2011 and accounted for almost one-third of all household types in Dublin City, the highest of any local authority area. However, vacant apartments comprised 60 per cent of all vacant dwellings in Dublin city and suburbs.

Changing household sizes

One-person households numbered 390,000 last year and made up nearly one-quarter of the total. Their number grew by one-fifth in the five years to 2011. Census results also show that there was a strong increase in the number of households with three rooms or less since 2002, coinciding with the high rate of apartment building over the same period. This increase in homes with fewer rooms was concentrated in the urban areas, where the share of households having three rooms or less increased from 15 per cent in 2002 to 21 per cent in 2011.

3.2.4 Growth of Urban Areas

Whilst rates of population have slowed, population levels generally continue to grow in urban areas. For example, the population of the Greater Dublin Area increased by 8.5% between 2006 and 2011. Whilst it is difficult in the present circumstances to confidently predict future population levels, it is clear from all of the official projections that urban areas will continue to grow, with consequent demand for housing and services and a concomitant demand for land to meet these needs.

It is clear, therefore, that there will be an ongoing requirement for new residential development in urban areas, including Dublin.

3.2.5 Economic Growth

In overall terms, the current approach of government to stimulating economic growth in the country is to maintain long-standing economic development policy, to return the country to a development path similar to that prior to the economic difficulties, albeit at lower annual rates of growth and with less dependency on the construction industry.

This is a prudent approach to strategic planning and it is reasonable and prudent to plan towards appropriate population levels, such as the projected 2.1 million in the Greater Dublin Area set out in the Regional Planning Guidelines for the GDA 2010-2022.

The alternative is to adopt a new strategy that would significantly weaken the objective of achieving a sustainable alignment of land use and high-quality, high-capacity public transport and that would also make poor use of the substantial investments that have been made in infrastructure in recent years and of the land banks that are available at existing and projected public transport nodes. The result would be a return to the unsustainable patterns of development sprawl that characterised the mid 20th century with its heavy reliance on use of the private car and consequent traffic congestion and pollution.

The strategic objective to increase sustainability and efficiency through greater alignment of land use and transport, especially high-quality, high-capacity public transport, therefore remains valid.

3.2.6 Delivery

It is clear that variations to certain objectives and tactical measures are required to ensure that the strategy can be delivered. There may be a need to reconsider the extent and timing of infrastructure and services that are essential to be delivered in close parallel with housing units. Similarly, the form of housing or its phasing may need to be reconfigured, particularly in the short term. Close consideration needs to be given to the delivery of residential units for which there is demand at prices that cover construction costs.

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3.3 CURRENT TRENDS

This analysis of the current situation and trends has been informed by:

- Review of the statutory, transport and land-use policies and objectives at national, regional and county level;
- Review of the statutory plans for strategic areas designated for large-scale residential development;
- Review of the planning permissions granted in these areas;
- Identification of the key principles in the delivery of successful high-density schemes taking as a benchmark the objectives of the ‘Sustainable Residential Development in Urban Areas’;
- Consultation with the following bodies:
 - Dublin City Council
 - South Dublin County Council
 - Dún Laoghaire Rathdown County Council
 - Fingal County Council
 - Dublin Docklands Development Authority
 - National Transport Authority
 - National Asset Management Agency
 - Construction Industry Federation / Irish Home Builders Association
 - National Road Authority; and
- Consultation with Estate Agents.

3.3.1 Housing Market Context

House Completions

CSO results show that national housing completion numbers fell to approximately 8,500 residential units in 2012 down from a high of over 93,000 units in 2006.

House Prices

The downturn has also seen house prices continue to fall. The CSO has recorded a drop in Irish house prices of almost 54% between early 2007 and November 2012.

Housing Rental

There is a very high proportion of households currently renting. The overall percentage of households renting their accommodation rose to 29 per cent, an increase of 47 per cent on 2006 figures (Census 2011 Results). This is even more

pronounced in urban areas, for example, in Dublin where almost one third of households were in private rented accommodation in 2011 compared with 19.2% in 2006.

Funding

Supply side funding of development, in addition to demand side funding of purchase has been effectively stalled for a number of years, with limited turnover of largely existing housing stock taking place. Added to the funding difficulty, is the uncertainty over price stability (and cost recovery) for both purchasers and developers, causing an effective stalemate in the market.

Cost

A number of factors have maintained a high construction cost for new housing, including wage rates, higher building control standards, requirement for increased unit sizes, supervision requirements, Part V requirements, and development contributions. In addition, the cost of finance has increased due to the risk averse nature of lending institutions i.e. charging more to lend less. Currently, the cost of construction of a residential unit may exceed the price that could be attained in the market.

New Homes Market Overview

The new homes market in Dublin has been in a dysfunctional state since 2007. Residential property values have fallen by approximately 60% since Q4 2006. (Sherry Fitzgerald, Lisney, CSO).

The scale of shrinkage in the property market is clearly reflected in the collapse of new mortgage lending. Approximately €2bn of new mortgage lending was issued in the 12 months to July 2012, down from approximately €40bn in 2006, a fall of about 95% (Irish Banking Federation). There were just 3,983 new mortgage drawdowns in Q3 2012 compared to almost 30,000 per quarter seen at the peak of the market.

The residential new homes market is currently dominated by First Time Buyers and movers which make up 90% of the mortgage market in value terms (Central Bank Q2 2012). They are seeking own-door “traditional housing” front door/ back door to meet their long term needs. First time buyers are typically seeking starter homes i.e. 2 and 3 bedroom houses. It is clear from consultations with estate agents that purchaser demand is, at present, focussed on the market for own-door houses.





Delivery

There are few new homes schemes under construction currently. Where development is active they are typically confined to a scale of 15–25 units due to funding constraints.

It is also apparent that any speculative residential development to occur over the short term will be focussed specifically at the first time buyer / mover market i.e. 2, 3 and 4 bedroom houses. The risk averse nature of lending institutions will also dictate this type of development, meaning schemes will be limited to probably no more than 20 units at a time.

Rental Market

There is currently little or no demand for the purchase of individual apartments or 'non-own door' housing in Dublin.

There is however continuing strong demand for **rental** accommodation in well located areas, including for apartments. Rents have been rising in Dublin, albeit slowly, for each of six quarters up to Q3 2012 (Daft.ie Rental Report Q3 2012, Lorcan Sirr).

Finally, it must also be noted that corporate investor demand is emerging for well located new / modern apartment developments of critical size for the rental market (e.g. Kennedy Wilson purchase of The Alliance residential building, Barrow Street Dublin, June 2012; The Gasworks; Sandford Close). In addition, developers are now interested in delivering apartments solely for the rental market, due to the strong general trend in the residential rental market, at least in the four Dublin local authority areas.

Household Makeup Census 2011

Census 2011 confirmed significant changes in the makeup of households:

- Home ownership rate in urban areas has fallen to 62%;
- There were 475,000 households in rented accommodation in the State in April 2011. 47% increase on Census 2006 (325,000);
- 32% of households in Dublin are in rented accommodation;
- Dublin has the highest proportion of apartments as a household type at 32%; and
- 89,000 new apartments were built in the State since 2001. This equates to 55% of all apartments in the State. 75% of all occupied apartments in April 2011 were rented.



Implications

It is clear that both renting and apartment living generally is accepted by the occupier market.

Strong demand for rental accommodation is likely to continue over the medium term due to:

- Constrained credit supply in the mortgage market;
- Expectation of reduction in disposable incomes due to new taxes and charges; and
- Concerns generally about job security.

Income / Cost Overview

While the cost of development is heavily impacted on by site cost, other factors require consideration in the delivery of housing:

- Local authority levy charges are an increasing proportion of the overall build cost;
- Development contributions can add up to 20% extra to the cost of development; and
- At present, there is little commercial imperative to develop apartments, in many areas, as values are below delivery cost.

UK Actions

The UK Government recently commissioned a "Review of the barriers to institutional investment in private rented homes" (the Montague Report). The report was published in August 2012. It recognised the importance of the private rented sector both in meeting people's needs and supporting economic growth. It also notes that there is real potential for investment in large-scale developments of purpose built rented housing to grow and be viable, and that local authorities should consider this sector in securing delivery on residential sites.

3.3.2 Physical Context

Delivery

While some areas designated for large-scale residential development have seen a certain level of delivery of housing take place, e.g. Adamstown, other areas such as Clonburris have yet to see any development, due to the current economic circumstances. In the case of Adamstown, the upgraded rail line and train station, and the other social infrastructure and services already in place and proposed, provide the opportunity to deliver significant further populations at this location.

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Unfinished Developments

In the absence of continued development there is a risk of a deterioration of the physical environments of developing areas. This is most obvious in areas of unfinished development. However, it may also affect areas where overall development has stalled and confidence in maintaining open spaces, roads, and services is decreased, with knock-on effects on consumer confidence.

A lack of continuing development in developing areas may also lead to social difficulties, through isolating communities in areas without supporting facilities. Areas that develop a poor reputation could be undermined and in the longer term are impeded from creating an area that can attract inward investment to fully develop the settlement.

Inefficiencies

In other locations, where the infrastructure development has preceded the development (e.g. Adamstown station, Cherrywood Luas), a lack of future residential development undermines the investment made and leads to inefficient use of infrastructure.

3.3.3 Planning Context

Changing Baseline

Plans for new residential communities in the strategic residential development areas are based on plans produced and costed in a period of strong economic growth. The content of these plans may not be consistent with current market conditions, and may not be fully applicable to a new future period of growth with a different economic potential and cost base.

Development Contributions

It has been identified in the consultation process that some development contributions (general contributions schemes and in particular supplementary schemes to fund large pieces of infrastructure such as rail lines) are high in the context of the current economy. Section 49 contributions have been cited as a key deterrent to short term delivery of development.

However, three of the Dublin Local Authorities (Dublin City Council, South Dublin County Council, and Fingal County Council) have recently (Autumn 2012) announced proposals to reduce their development levies in a bid to encourage development in both the commercial and residential sectors.

Mix of Typologies

The mix of unit types required to deliver density in some schemes is not consistent with current economic conditions for delivery and market demand. In particular, demand for apartment purchase has weakened, even where the rental market for this product is strong. While this does not negate that there is a recognised demand for apartments or other types of non-own door housing, there is currently a surplus of this type of housing in some locations, which funders are cognisant of, and therefore slow to further finance.

3.4 BARRIERS TO DELIVERY OF LARGE-SCALE RESIDENTIAL DEVELOPMENT AREAS

Given the range of issues, considerations, and current trends outlined here, it can be seen that significant barriers to the development of large-scale residential development areas exist, pertaining to both supply and demand:

Supply side

- Cost of delivering elements of higher density residential development is prohibitive in the current market e.g. underground car parking can cost up to €35k per space. In addition, there is significant front-loading of costs for delivery of apartment developments, due to the need to deliver the entire block prior to sale completion and occupation of the development;
- General development contributions are seen as high. As schemes are generally based on numbers of units delivered, this more directly affects large-scale residential developments. In addition, large-scale residential development areas are typically located along rail corridors thus incurring Section 49 contributions, which can be significant;
- Difficulty in developing and selling apartment units incrementally (compared to own door development);
- Higher building standards place more restrictions on developers, in terms of room size requirements, extent of frontage, accessibility etc. making higher density development more difficult to deliver on a particular site;
- Delivery of sustainable residential development requires a higher standard of development than is typically delivered, thus incurring additional upfront costs compared to lower density housing development;
- Small scale lower density locations may be more attractive to develop in the short term, as they require less up-front investment, and can be more easily delivered on an incremental basis;
- There is a significant quantum of land both within the four Dublin counties, and particularly in neighbouring counties, which are not well served by public transport, on which lower density residential units could be developed with relative ease and at substantially reduced cost. There is a real risk that those





Figure 3.5.1: Lands Zoned for Residential Development in Dublin

lands outside Dublin will be built out before development on sites earmarked for higher densities occurs within the Dublin area, therefore threatening the delivery of strategic residential development areas, and the delivery of government policy in relation to travel demand reduction and public transport usage; and

- With regard to certain planning frameworks, specific requirements with regard to densities, infrastructural provision, and phasing can be seen as impediments to their short term development.

Demand side

- Agents have indicated that the new homes sales market is currently dominated by owner occupiers and that, currently, market demand is largely for houses only;
- Their indication is that this is not expected to change for the foreseeable future;
- Demand from retail (amateur) investors has disappeared;
- Banks are less likely to give loans for apartment purchases (due to the expectation of continuing falling prices in this market) than for 'traditional housing'. In addition, funders are wary of being over exposed in any one location, and therefore reluctant to fund large-scale schemes; and
- Management fees are seen as a deterrent both to owner occupiers and to landlords.

3.5 ANALYSIS OF RESIDENTIALLY ZONED LANDS

A key step in this Study is to analyse and understand the quantum of lands zoned in large-scale residential development areas (or strategic residential development areas) in the four Dublin local authority areas.

There are extensive zoned lands throughout the study area that allow for the development of residential units. These lands can be broken down into three broad categories:

- Infill sites within existing built areas which would generally allow for only small scale development;
- Small scale lands zoned specifically for new residential communities; and
- Large-scale residentially zoned lands for new communities (Strategic Development Zones (SDZ) / Local Area Plan (LAP) areas etc).

Lands zoned for residential development are highlighted in Figure 3.5.1. The map demonstrates the dispersed nature of the residential land bank in Dublin. Some of the lands are located on the edges of existing towns / residential areas. The delivery of some of these lands may hinder the opportunity to develop a compact, well-connected, public transport-supported form of growth, while others are more effectively connected to their immediate urban settlements.

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3.5.1 Other Residentially Zoned Lands

Lands not classified in this study as 'Strategic Residential Development Areas' fall into the category of 'other residentially zoned lands', and can be seen in Figure 3.5.2. This classification is purely for the purposes of distinguishing these lands in this study from the 'Strategic Residential Development Areas'.

Other residentially zoned lands are defined as lands outside of the Strategic Residential Development Areas which are zoned for new residential communities and zoned as A1 on the myplan.ie website. For the most part (with some exceptions) these lands are not located on high frequency public transportation routes and their areas have not been subject to significant levels of investment in public transportation infrastructure. It is recognised that this grouping covers a wide range of residentially zoned lands, with a range of density and other infrastructure requirements, and planning frameworks.

However, some of these lands could potentially be seen as a more attractive prospect to developers and funders for several reasons:

- Some of these lands allow lower density own-door development that is perceived as being fundable, deliverable, and acceptable to today's market;
- Some are potentially easier to achieve a phased development on, due to infrastructure provision and outstanding requirements;
- Some do not incur Section 49 development contributions; and
- Some of the lands offer more flexibility regarding development proposals in comparison to lands within SDZ / LAP designations.



Figure 3.5.2: Other Residentially Zoned Lands in Dublin

3.5.2 Analysis & Output

A detailed analysis was carried out on each of the Strategic Residential Development Areas as listed in Table 1.3.1 (May 2012). In addition analysis has been carried out into Other Residentially Zoned Lands within each of the four Dublin counties.

In each case:

- A. The statutory plans in place for each area were examined to determine the quantum, density and scale of residential development proposed;
- B. An investigation of the planning history for each site was carried out to ascertain the type and scale of development which has already been permitted; and
- C. Finally, the level of development that has already taken place in each area was examined. This was broken down into the typology of the residential units (houses / apartments), their density, whether their development has been completed and if they are currently occupied or unoccupied and/or under construction.

GIS datasets for each of the Strategic Residential Development Areas have been compiled and representative mapping of each area showing the status of the lands has been produced. The status of the lands has been categorised as follows:

- Built Residential – representing areas which have housing/apartment development completed;
- Under Construction* – developments for which construction commenced but has not been completed;
- Outstanding Permission** – areas which have been granted permission for residential development that has not yet commenced;
- Built Other – areas for which development other than residential has been carried out; and
- Potential Infill – areas which the Local Authority has designated as having potential to accommodate infill development.

* It is not known if construction works are still ongoing.

** It is not known if this will be delivered.

Data Sheets have been compiled for each of the strategic residential development areas, containing a breakdown of the current development status of the lands, details of any extant planning permissions and their potential residential development capacity. *See Appendix E for details.*

Tables 3.5.1 and 3.5.2 outline the quantum of deliverable housing in the four Dublin local authority areas in both Strategic Residential Development Areas and Other Residentially Zoned Lands. Housing is split up into Deliverable Apartments and Deliverable Houses.

	South Dublin	Fingal	DLR	DCC	Total
Total Potential Deliverable Apartments	2,164	3,800	3,285	4,369 Clongriffin/Belmayne 3,127 Cherry Orchard 981 Ballymun 261 (units scheduled for completion in 2012)	13,618
Total Potential Deliverable Houses	638	1,498	574	Clongriffin/Belmayne 1,520	4,230
Total	2,802	5,298	3,859	5,889	17,848

Table 3.5.1 Total Potential Deliverable* Units Strategic Residential Development Areas

	South Dublin (Tallaght + A1 Zoned Lands + Infill)	Fingal	DLR	DCC	Total
Total Potential Deliverable Apartments	1,443	6,140	Unknown	Unknown	7,583
Total Potential Deliverable Houses	1,221	5,458	394	577	7,650
Total	2,664	11,598	394	577	15,233

Table 3.5.2 Total Potential Deliverable* Units Other Residentially Zoned Lands

*** Deliverable units = Under construction + Outstanding Permissions**

Table 3.5.1 outlines the quantum of housing units currently 'deliverable' across the four Dublin local authority areas. 'Deliverable' is taken to include units which are either classified as under construction or for which outstanding planning permission exists. With regard to units which are under construction it is unknown if their construction is ongoing or has stalled. The term 'Deliverable' therefore refers to development where permission for development exists, but does not refer to the ability of the development to be delivered, due to market, funding, physical or other constraints.

Table 3.5.2 highlights deliverable housing currently available in the Other Residentially Zoned Lands throughout Dublin. Figures for the number of deliverable apartment units in the Other Residentially Zoned Lands within Dun Laoghaire Rathdown and Dublin City were not available at the time of drafting this report.

It should be noted that with regard to the figures for Total Potential Deliverable Houses, Other Residentially Zoned lands contain a considerably higher number (7,650 houses) compared to Strategic Residential Development Areas (4,230 houses).

The figures set out in the two tables highlight the fact that a range of housing options exists across the Dublin area. The variety in the quantum and typology of deliverable residential units across the four local authority areas can, in part, be explained by the differences that have traditionally existed in the housing market and market preferences for varying housing types in the different parts of Dublin.

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3.5.3 Own Door Housing

With respect to own door housing in particular, Table 3.5.3 below sets out both the existing situation and the potential capacity for such development throughout the Strategic Residential Development Areas of the four Dublin local authorities.

Within the Strategic Residential Development Areas, the main location of existing own door housing units is primarily Stepside, and secondly Clongriffin/Belmayne in the North Fringe area of the city.

For outstanding permissions, the weighting is heavily dominated by the north of the city, in Fingal and in the North Fringe.

Area	Existing Occupied Houses	Under Construction /Unoccupied Houses	Outstanding Permission Houses	*Total Potential Houses	Total Houses
Fingal					
Hansfield	111	64	334	398	509
Phoenix Park Racecourse	44	0	275	275	319
Portmarnock South	12	8	646	654	666
Baldoyle / Stapolin	361	27	144	171	532
Fingal Total	528	99	1,399	1,498	2,026
South Dublin					
Adamstown	367	117	487	604	971
Clonburris	0	0	151	151	151
South Dublin Total	367	117	638	755	1,122
DLR					
Stepside	3,586	28	528	556	4,142
Sandyford	0	0	0	0	0
Cherrywood	328	0	18	18	346
DLR Total	3,914	28	546	574	4,488
**DCC (permitted)					
Ballymun	0	n/a	n/a	0	0
Clongriffin/Belmayne	976	n/a	1,520	1,520	2,496
Pelletstown	265	n/a	n/a	n/a	265
Park West / Cherry Orchard	13	n/a	n/a	n/a	13
Naas Road	0	n/a	n/a	n/a	0
DCC Total	1,254	n/a	1,520	1,520	2,774
Total Own Door				4,347	10,410

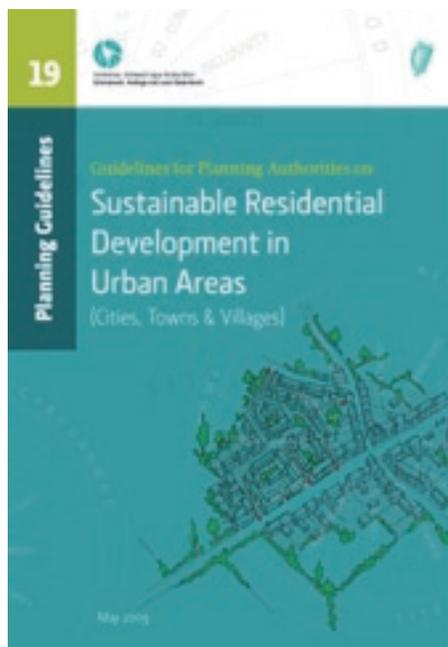
Table 3.5.3 Own Door Housing

** Potential figure relates to number of units under construction / unoccupied + outstanding permissions.*

*** DCC Figures relate to number of houses permitted. (Breakdown not available of typology of units under construction / unoccupied)*



4. Key Principles of High Density Schemes



4.1 KEY PRINCIPLES

'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages)' and the accompanying 'Urban Design Manual - A best practice guide' set out the criteria to be used when designing new residential schemes or areas.

The quality of new residential development is central to the aim of creating sustainable communities.

A key design aim in delivering sustainable communities is to reduce, as far as possible, the need to travel, particularly by private car, by facilitating mixed-use development and by promoting the efficient use of land and of investment in public transport. (Sustainable Residential Development in Urban Areas, pp 15, DoECLG 2009)

The Guidelines establish a series of high-level aims for successful, sustainable, and quality residential development in urban areas:

- Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience;
- Provide a good range of community and support facilities, where and when they are needed;
- Present an attractive, well-maintained appearance, with a distinct sense of place;
- Are easy to access and to find one's way around;
- Facilitate walking, cycling and public transport, and minimise the need to use cars;
- Promote the efficient use of land and of energy, and minimise greenhouse gas emissions;
- Promote social integration, and provide accommodation for a diverse range of household types and age groups; and
- Enhance and protect the built and natural heritage.

4.2 BEST PRACTICE DESIGN CRITERIA

It equally sets out Best Practice Design Criteria, to be considered at the early stages of design development:

1. Context: How does the development respond to its surroundings?
2. Connections: How well is the new neighbourhood / site connected?
3. Inclusivity: How easily can people use and access the development?
4. Variety: How does the development promote a good mix of activities?
5. Efficiency: How does the development make appropriate use of resources, including land?
6. Distinctiveness: How do the proposals create a sense of place?
7. Layout: How does the proposal create people-friendly streets and spaces?
8. Public realm: How safe, secure and enjoyable are the public areas?
9. Adaptability: How will the buildings cope with change?
10. Privacy / amenity: How do the buildings provide a high quality amenity?
11. Parking: How will the parking be secure and attractive?
12. Detailed design: How well thought through is the building and landscape design?

4.3 APPLICATION

The DoECLG Guidelines provide guidance on the delivery of quality residential development in Ireland. They strongly accord with other policy guidelines in relation to sustainable development, and the alignment of land use and transport policy. In addition, they respond to issues surrounding how best to deliver new places for people to live, with a focus on quality of life.

The Guidelines are strongly aligned with best practice in the UK and other European countries, and as such have been proven on varying scales and in varying locations using a range of housing typologies. Since their publication, however, significant delivery of residential development in Ireland has effectively stalled. As such, their application to housing developments here has not been effectively realised.

However, the principles presented, if delivered on, will create a form of residential development which, nominally at least, is highly desirable in today's environment in quality of life terms. Traditional low density development struggles to deliver on services provision, quality transport linkages, and non-traditional family units which are increasingly required to cater to changing household sizes in Ireland (ref: pp15). The emergence of sustainable residential developments over time throughout the UK and Europe reflects changing

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lifestyles, priorities and demographics. They also respond to the increasing costs, both in time and money terms, of travel to work, school and leisure. Equally, such developments typically prioritise the building of communities early in the delivery process through the upfront delivery of community facilities, high quality public space, and facilities for all age groups.

Sustainable residential development principles deliver enhanced living environments through:

- The provision of services and infrastructure including community, education, quality public space at an early stage in the development process;
- A reduction in the travel time and distance to essential services; and
- Delivery of a range of housing typologies and choice, over the homogeneity of traditional housing schemes which have tended to be predominantly detached or semi-detached housing. This allows a mix of demographics, a mix of tenures, and opportunities for lifelong communities, not typically associated with traditional housing schemes.

4.4 DRIVERS FOR SUSTAINABLE RESIDENTIAL DEVELOPMENT

The promotion of sustainable residential development, which typically comprises increased densities and is of a compact nature, has become a central tenet of international planning policy and best practise over the past number of years. The benefits cited include:

- Optimisation of the efficient, sustainable delivery of services such as schools, public transport, roads, waste management, etc.;
- Compact residential development is economically advantageous in terms of costs of infrastructure provision per dwelling unit;
- Reduction in the need for private car based transportation, particularly if areas are served by high quality public transportation;
- Higher density communities allow for a greater variety of leisure, shopping, amenities, work, and travel options in close proximity, reducing the need to travel. The wide cross-section of people and their activities also makes for a culturally rich area;
- Delivery of operational economies of scale;
- Higher productivity found in 'accessible' cities with efficient transportation systems than in more dispersed places (Cervero, 2000); and
- Facilitation of institutional investment.

National policy has increasingly sought to align land use and transport more closely, given their close inter-relationship. The degree of alignment has been strengthened by legislative amendments and changes to planning policy guidance.

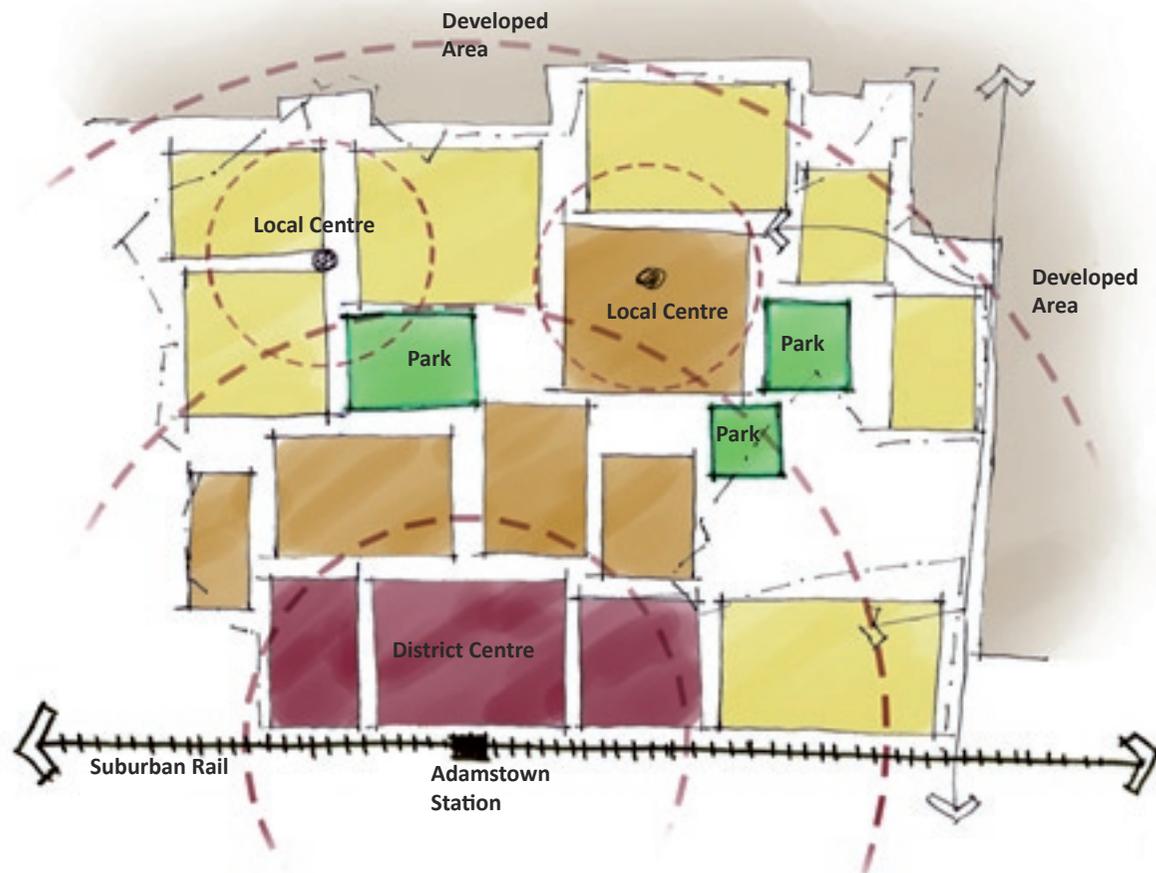
In addition, government policy and strategies have evolved to respond to the changes in the housing market, such as increased demand, and to housing supply, such as the growth in urban and peri-urban areas, and setting the pattern for the future development of the country's core urban areas and those other areas most under pressure from urban influences. This was set in the context of seeking to arrest urban sprawl, protection of scarce resources, and the optimisation of public infrastructure investment.

4.5 CASE STUDIES

For the purposes of this report, a number of successful large and small scale residential developments throughout Ireland, UK and Europe were examined. Presented here is a selection of case studies which embody the principles as outlined in the *'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages)'* and the accompanying *'Urban Design Manual - A best practice guide'*.

The case studies represent areas at various stages of development and scale. They are selected to illustrate particular points of interest brought to bear on achieving delivery and in creating a quality residential environment. However, it must be acknowledged that very different conditions exist for development in other European countries, in areas such as land ownership and financing arrangements at local level.





Density: High Medium Low

4.5.1 Adamstown – TOD Transit Oriented Development, South Dublin County Council

Located near Lucan to the west of Dublin City, on the Dublin-Kildare Rail line

Potential Population 25,000 (8-10,000 dwellings + associated services)

Key characteristics – Public transport led residential development

Key elements of delivery:

- Strategic development zone planning scheme which delivers fast-tracks planning applications that comply with the scheme;
- South Dublin County Council as development agency with responsibility for delivery of the scheme;
- Joint venture infrastructure delivery company (3 landowners);
- Infrastructure led development with a clear phasing strategy;
- Transit oriented development principles applied with higher density development (town centre & high density housing) prioritised adjacent to public transport hub;
- Town centre strategy; and
- Public realm strategy.

Site Area: 213.9 ha

Density: 53 u/ha Gross

Plot Ratio: 1:0.54



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4.5.2 Pelletstown – Dublin City Council

Located to the north-west of Dublin City, on the Dublin-Sligo Rail line

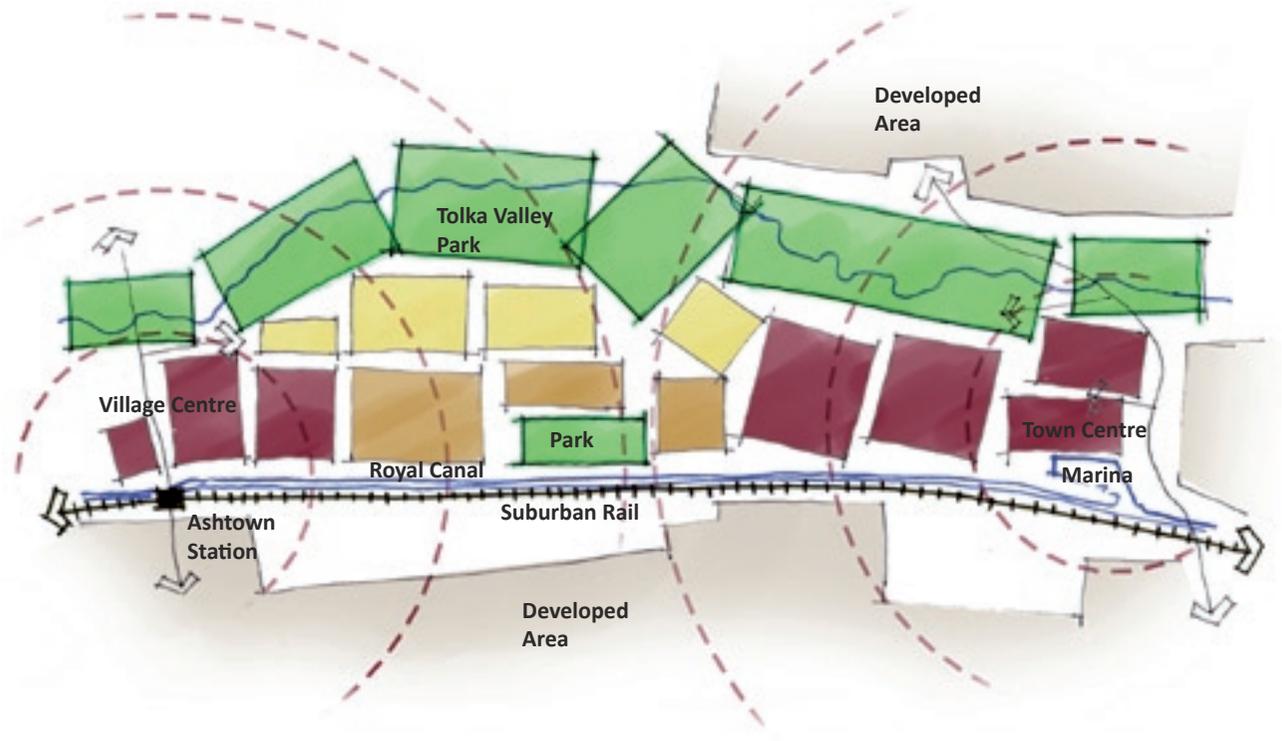
Potential Population 10,000 (4,000 dwellings + associated services)

Key characteristics – Sustainable living community on a public transport rail line

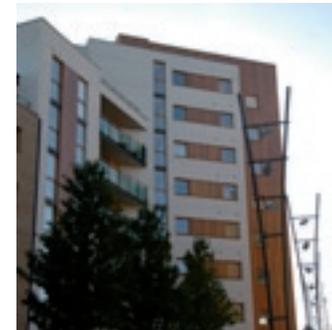
Key elements of delivery:

- High density residential community;
- Phased development around 2 rail stations with town centre locations at each (2nd rail hub still to be delivered);
- Balanced housing mix incl. delivery of family housing;
- Creation of a sense of place; and
- Strong public realm strategy.

Site Area: 42 ha
 Density: 80-150 u/ha Gross
 Plot Ratio: 1:1.0 - 1:1.25



Density: High Medium Low





4.5.3 Mount Saint Anne's - Dublin City Council

Located in the established residential suburb of Milltown, on the Luas Line to Stephens Green

Potential Population 2,000 (650 dwellings + associated services)

Key characteristics – Suburban compact community

Key elements of delivery:

- Mix of unit types with 75% apartments to 25% houses and duplexes;
- Combination of underground parking for apartments / commercial units and surface carparking for own-door units; and
- Quality public space provision & maintenance.

Site Area: 9.2 ha

Density: 71 u/ha Gross

Bed Spaces: 2124



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4.5.4 Kronsberg, Hanover Germany

Located 8kms from Hanover city centre, in the north of Germany

Potential Population 15,000 (6,000 dwellings)

Key characteristics – Focused funding to initiate development from the public sector

Mid 1990s, no investors would risk privately financed residential development. Grants and subsidies were used as incentives to provide a broad mix of housing.

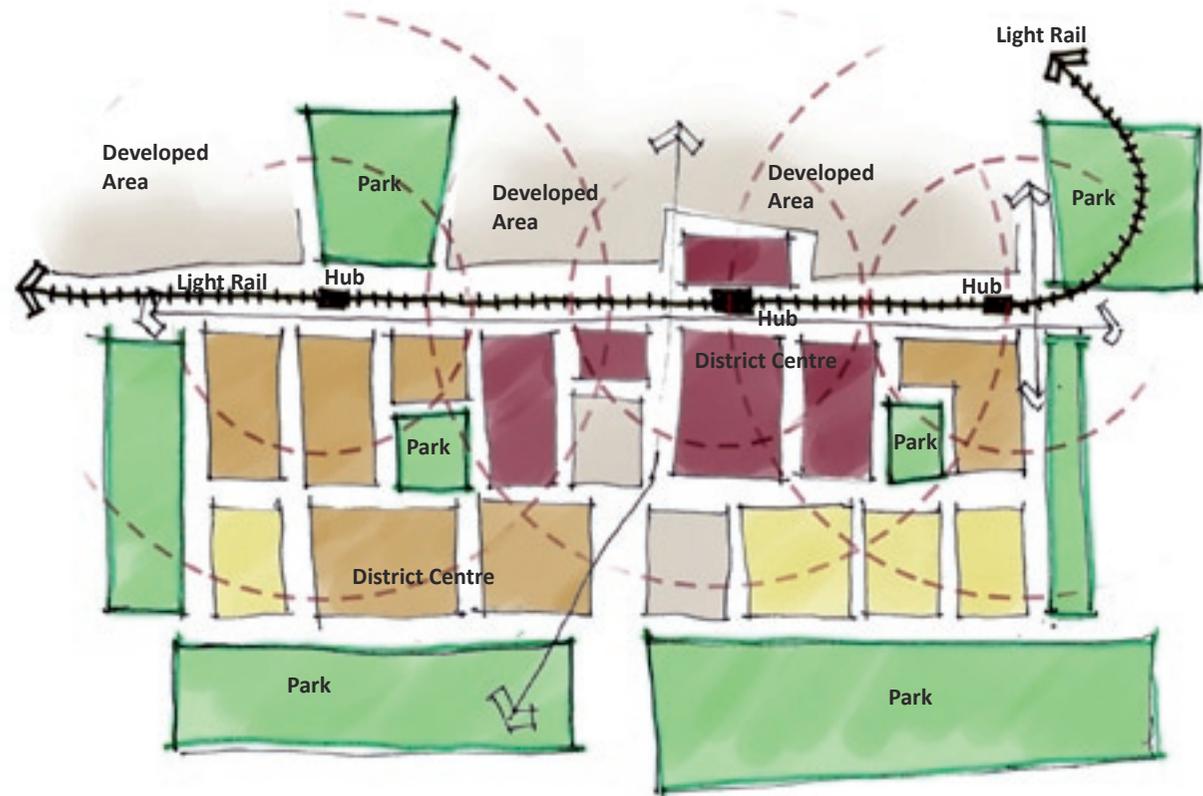
Key elements of delivery:

- High density residential development comprising a wide variety of tenures including affordable housing with moderate rents, low rent homes and owner-occupied units;
- Located on a tram line with 3 tramstops;
- High quality infrastructure provision (including social & cultural) a priority from the outset;
- Environmental strategy to achieve a reduction of 60% of carbon dioxide emissions compared to conventional new construction in Germany;
- Many of the apartment blocks have shared community areas;
- A parking space ratio of 0.8 per apartment was set; and
- Mix of housing typologies with 10% single-family housing & 90% apartments.

Site Area: 160 ha

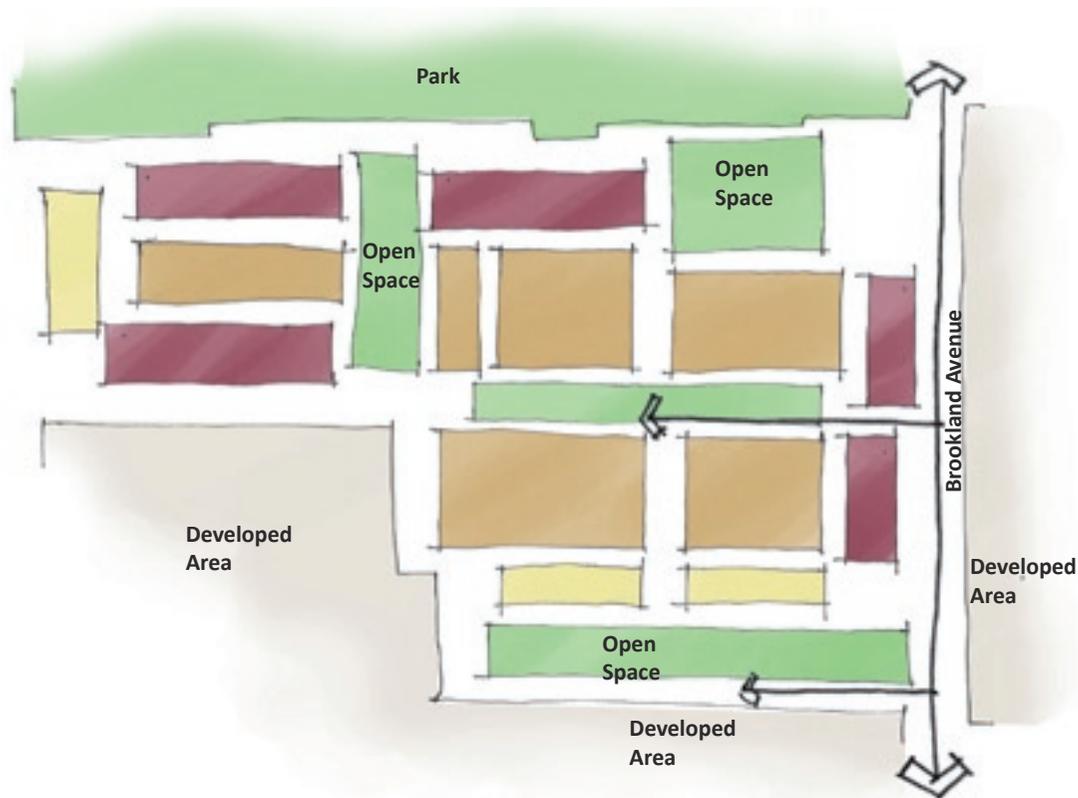
Density: 56 u/ha Gross

Bed Spaces: 15k



Density: High Medium Low





4.5.5 Brooklands Avenue, Cambridge England

Located 2kms from Cambridge city centre, less than 1km to Cambridge main line rail station (45 mins to London)

Potential Population 1,000+ (378 dwellings - 212 houses and 166 apartments Housing led)

Key characteristics –High quality housing in urban infill location

Key elements of delivery:

- Masterplan developed on a clear landscape concept;
- Range of housing in terraces, courtyards and set piece apartment blocks;
- Mix of housing types and design ranging from one-bed accessible, affordable flats to luxurious 5-bed courtyard villas;
- Traditional gardens replaced by courts, roof terraces, large balconies;
- Mixed tenure arrangement which includes 30% affordable types;
- Focus on pedestrian and cycle demands, mews streets, shared surfaces, communal play areas, discreet car parking and cycle parking for all dwellings; and
- Street hierarchy and layout achieved with cooperation and support of the Council.

Site Area: 9.5 ha

Density: 47 u/ha Gross

Bed Spaces: 1004

Density: High Medium Low



4

4.6 SUMMARY

The case study overview presented here seeks to profile some examples of successful large-scale residential development. The overview highlights key elements of each development which have contributed to their successful delivery, and which may be pertinent for consideration in the context of this study.

In assessing these and other case studies (as referenced in Appendix C), certain core principles have emerged as being common to all the successful developments. These core principles are particularly pertinent for this study in the context of the analysis of issues, trends, and policy review undertaken.

The following is a summary of these principles:

Principles for Sustainable Residential Development

- Focus growth in the right places;
- Collaboration between a range of stakeholders / investors;
- Early decision to invest in high quality infrastructure and services as a priority for residents;
- Compact communities to optimise infrastructure;
- Development of stable neighbourhoods. Housing is varied and adaptable with a range of sizes and types provided, and a mix of tenure options to build balanced communities;
- Developers adhere to a 'Quality Programme' which defines architectural quality; the character of public spaces; standards for colours, materials, energy and ecology;
- Diversity in building type through use of variety of architects in design; and
- The outdoor spaces and public realm are well managed and maintained, through long-term maintenance programmes established at the outset.



5. Development Considerations



5.1 INTRODUCTION

Evolving from earlier stages of this study, this section looks at the key factors to be considered in the development of residential areas. This section looks at each component part, reviews its conventional delivery to date and examines options for reworking each part to respond to the current housing environment.

Development considerations are reviewed in the context of the study brief and the previously stated challenge of how to deliver residential development in strategic residential development areas without compromising quality and policy in the current economic climate.

The study identifies the principal factors, and addresses them as follows:

- Assess and prioritise issues to be managed in developing areas;
- Review of the development models or strategies which drive the form of residential areas;
- Review the development mix and patterns of housing development including an assessment of the range and type of housing typologies and associated parking and public realm strategies; and
- Review policy impacting on residential development delivery.

It is important to recognise that while this study separates out these component parts for assessment, these factors all work together to influence form and delivery of housing. It is also important to restate that these considerations are principally concerned with the physical planning of residential development and that there are significant non-physical planning considerations that have an important bearing on market delivery of housing, which are beyond the scope of this study.

See Appendix G and H for detailed working of the component parts.



5.2 ADDRESS CURRENT ISSUES – ASSESSMENT AND PRIORITISATION STRATEGY

Many of the strategic residential development areas targeted in this report have some level of development already commenced, with none having achieved their full build-out potential. This partial development of key locations raises a number of issues pertinent to the site itself, but also to the delivery of all of these strategic housing areas over a broadly similar time period.

The following issues are common to many of the study areas and are relevant for consideration:

Issues

- Incomplete development areas with no timeframe for completion;
- Inappropriate treatment of vacant sites negatively impacting on the public realm;
- Incomplete connections through to key hubs of activity and transport;
- Ongoing maintenance issues of already built areas;
- Undelivered services (private / public); and
- Poorly managed public realm (issues of taking in charge, management company setups, etc).

Issues of prioritisation arise, such as: should some housing areas be prioritised for delivery over others; within the housing areas, should some locations be prioritised; should certain elements of the area be addressed during the 'downtime' of development etc.

It is recommended that an assessment and prioritisation strategy be undertaken for the strategic residential development areas. This strategy would outline the interventions required in the short term to ensure the delivery of a quality living environment, and would either prioritise the location for further development intervention by the public or private sector, or alternatively could place it in a 'holding' position for future public or private sector intervention.

Critically, this assessment and prioritisation strategy would ensure that all strategic residential development areas are primed for future development to create a positive perception of management of these locations. Ultimately, these housing locations must remain desirable locations from a market perspective if delivery is to be achieved in the near term.

5

5.3 DEVELOPMENT MODELS

Development models look at:

- The drivers of a housing framework or masterplan e.g. rail hub, existing development;
- Phasing of development;
- Mix of uses and densities;
- Infrastructure delivery and optimisation; and
- Delivery of a quality public realm.

In seeking to work within a range of densities already established, the series of phasing models examines how overall density can be retained but phased to achieve:

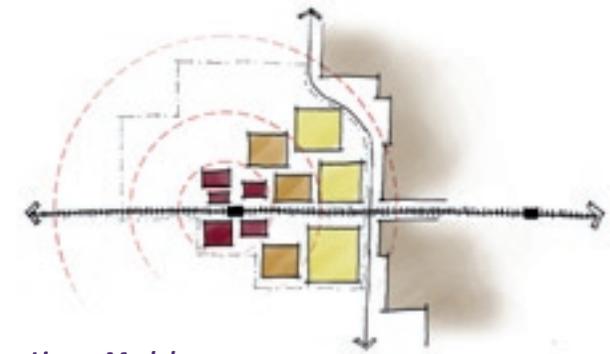
- Delivery in the short to medium term;
- Incremental development;
- Response to market information received that demand (if any) is for lower density own-door housing units;
- Rebalancing of high with lower density housing;
- Creation of a sense of place from the outset;
- Delivery of quality environment through all stages;
- Delivery of quality public realm through all stages;
- Minimisation of settlement pattern disruption (avoidance of significant gaps where possible);
- Delivery of mix of housing typologies and tenure possibilities;
- Optimisation of current infrastructure;
- Minimisation of upfront infrastructure delivery while providing for necessary infrastructure provision;
- Future proofing for long term development potential;
- Delivery of each phase of development as a robust standalone housing environment but which integrates into a longer term delivery of development; and
- Acceptable parking strategy that does not impact overly on cost, public realm or density achieved.

See Appendix G for details.



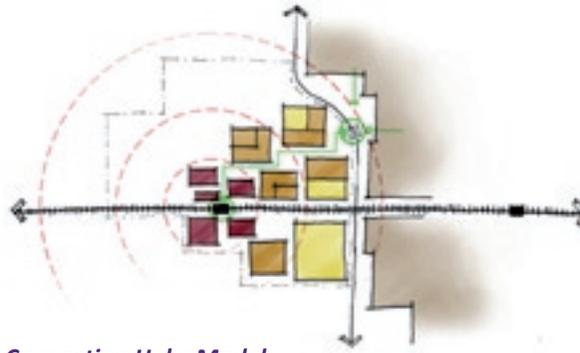
Radial Model "Current"

- Focused high density at rail hub;
- Early establishment of town centre mixed use at rail hub; and
- Incremental drop in density with distance from hub.



Linear Model

- Mix of densities through each phase;
- Limited infrastructure required for early phases; and
- Managed delivery of public open space required.



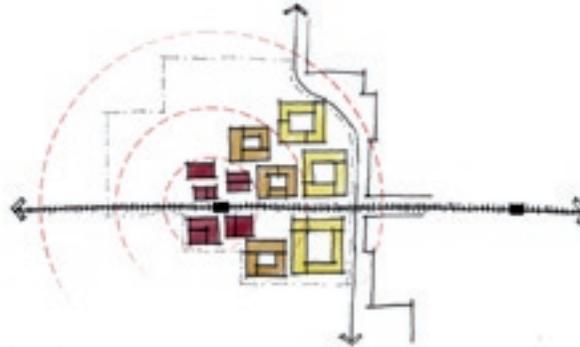
Connecting Hubs Model

- Focus on connecting transport hubs;
- Mix of densities through each phase; and
- Limited infrastructure required for early phases.



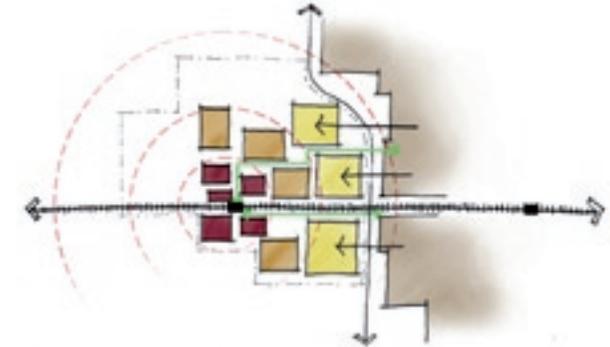
Consolidation model

- Focus on connecting fragmented development;
- Limited additional infrastructure required for early phases; and
- Consolidating the built environment to create a sense of place.



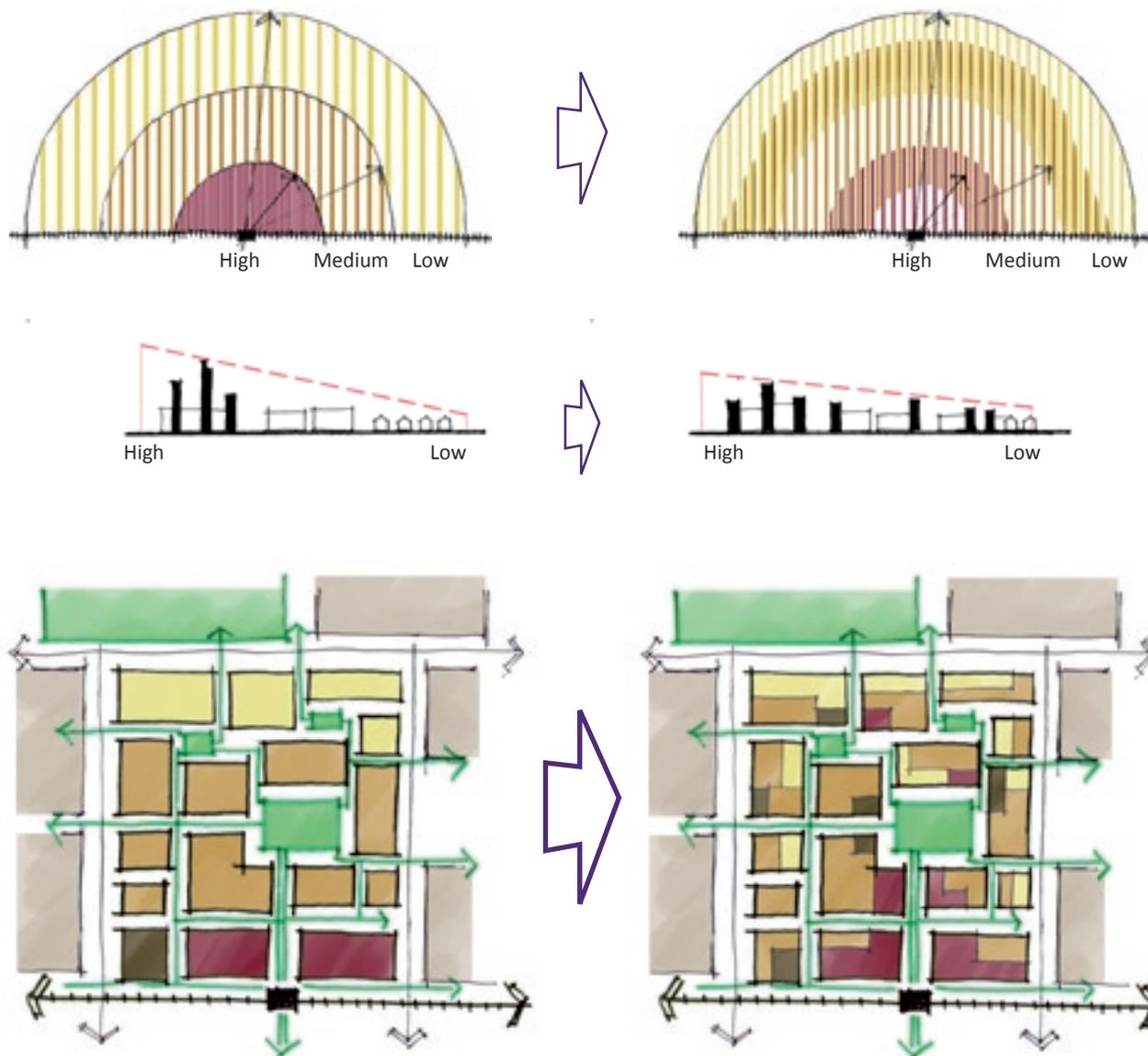
'Mix' Model

- Managed incremental development;
- Strong focus on managing public open space; and
- Quality linkages required.



Expanding City Model

- Expansion to existing development areas;
- Build on existing infrastructure; and
- Establish new links between existing developments and public transport hub.



Legend:

High density mixed-use
 High density residential
 Medium density residential
 Low density residential
 Public open space

5.4 DEVELOPMENT MIX

Conventional approaches to development mix typically look at density of development radiating out from a central hub or core (typically a public transport hub or commercial centre), in bands of high to low density. This review of the development mix seeks to balance out the density 'bands' such that a range of development types can be delivered through an area, still retaining a more balanced range of densities moving out from the central area. This serves to allow development of varying densities and profiles through the area and therefore through phasing stages and time to potentially catalyse development delivery. It also creates a more diverse living environment throughout the development.

Development Patterns

The development patterns examined the mix of housing types that can emerge and how they can work together, their impact on density, open space, parking, public realm and streets. The assessment here reads from lowest density of detached houses to highest density of large-scale apartment development.

See Appendix H for details.

Housing Typologies (Parking strategies / Public realm strategies)

From our review of the residential housing market and delivery in Dublin, it is clear that a wide range of housing typologies have been successfully delivered in Dublin over the recent past. This contrasts with the more conventional detached and semi-detached housing delivered through many parts of Dublin in the 1960s-'80s.

The assessment here profiles a wide variety of housing types prevalent in both Ireland and other European countries, including the UK.

Housing typologies also dictate the resulting parking and street typologies, and indeed open space requirements and profile. These are profiled and assessed as part of this development considerations.

See Appendix H for details.

5

5.5 POLICY REVIEW

Physical planning policy deals with the framework within which development takes place. In addition to direct national policy dealing with housing density standards and targets, land use and transport planning integration, minimum standards of residential development, building regulations and so on, more county or local policy deals with zoning, parking standards, open space standards etc.

Elements of policy which pertain to the delivery of housing development at key strategic locations have been reviewed as they currently stand for their impact, and how they may change in order to facilitate residential development.

Central to policy review measures is the consideration of the economics of delivering strategic residential development areas as the way forward over non implementation and reversion to the status quo of low density housing and continued sprawl.

The following are subject to consideration:

- Policy in relation to Sustainable Residential Development standards;
- Flexibility in minimum densities considered within the context of achieving overall density standards;
- Density measurement tools – eg bedspaces per hectare combined with number of units per hectare;
- Financial contributions and levies;
- Security of delivery;
- Public sector involvement - Coordinated government approach to ‘show confidence’ - package of measures eg. focussing of available investment in supporting infrastructure, adjustment to development contribution requirements, co-ordinated support for appropriate development; and
- Management of the delivery process through the local authority.

5.6 SUMMARY OF DEVELOPMENT CONSIDERATIONS

The development considerations put forward seek to address the issues arising in a range of housing locations. The application of any approach to deal with the development considerations needs to be carefully considered for appropriateness with respect to each location, as location specific attributes will dictate the measures required for progress towards delivery of a sustainable residential location.

The following is a summary of the development considerations developed in this section of the study:

1. **Address Current Issues**
 - In terms of infrastructure, connectivity, taking in charge;
 - Perception change / quality of living endorsement;
2. **Development Model / Phasing**
 - Delivery of development & infrastructure;
 - Optimisation of existing infrastructure investment;
3. **Development Mix**
 - Residential / Retail / Commercial / Other;
 - Flexibility / dispersal / balancing out; and
4. **Policy Interventions**
 - Contributions, levies, planning procedures, security of delivery, coordinated government approach.



5.7 CONCLUSIONS

As previously acknowledged, the current issue of how to deliver residential development in strategic residential development areas, without compromising quality and policy in the current economic climate, is subject to an intertwined and complex range of factors, of which physical factors are only one consideration.

Following this review of development considerations, in addition to the analyses of issues and trends undertaken during the study, some clear conclusions can be drawn.

It is considered that while the component parts of housing delivery can be addressed, improved, and further tailored to meet the requirements of specific housing locations, that of themselves, revised development considerations will not be sufficient to deliver housing in the short to mid term. Instead, the review of development considerations permits the assessment of how the component parts work together, and how they can be revisited as part of a broader strategy approach to housing delivery.



From the review of development approaches and issues for consideration in developing residential locations, the following is relevant:

- Addressing current issues in existing residential locations will improve the living environment for current residents, and help to position an area favorably in the market. However, alone, it may not be sufficient to incentivise new development to take place;
- A wide range of housing typologies and housing innovations have already been successfully implemented throughout the housing areas under review in this study. However, it is considered that further innovations in relation to housing typologies is not in itself a solution to the short term delivery of residential units;
- A review of the phasing strategy of the key housing areas will address some infrastructure delivery issues and upfront funding requirements, but will not in itself address the overall issue of marketability of areas which are currently at a standstill. Additionally, the range of extant planning permissions (effectively undeliverable in the current market) combined with funding difficulties has led to a stalemate in housing delivery; and
- Compromised policy in relation to density standards will likely lead to long term urban development problems which will have serious economic repercussions.

A proposed approach which addresses the development considerations raised in this chapter, responds to the conclusions above and the issues raised in the earlier chapters, is put forward in Chapter 6.

6. 'Kickstart' Incremental Development

6.1 INTRODUCTION

The previous section of this study reviewed a series of development considerations which consider the key factors in delivering residential development. Given the range of issues which can impact on residential delivery, an approach which addresses all these factors, and is consistent with the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, is put forward here. The 'Kickstart' Incremental Development Approach is recommended which can be adapted for application to a range of strategic residentially zoned lands.

It essentially comprises a plan-led approach to the development of the Strategic Residential Development Areas in a manner that:

- Allows for initial development at a lower density;
- Leverages the use of existing infrastructure;
- Provides for investment in necessary early infrastructure while seeking to minimise early infrastructure costs;
- Promotes the enhancement of the environs of each phase; and
- Achieves the overall target density in a phased manner.

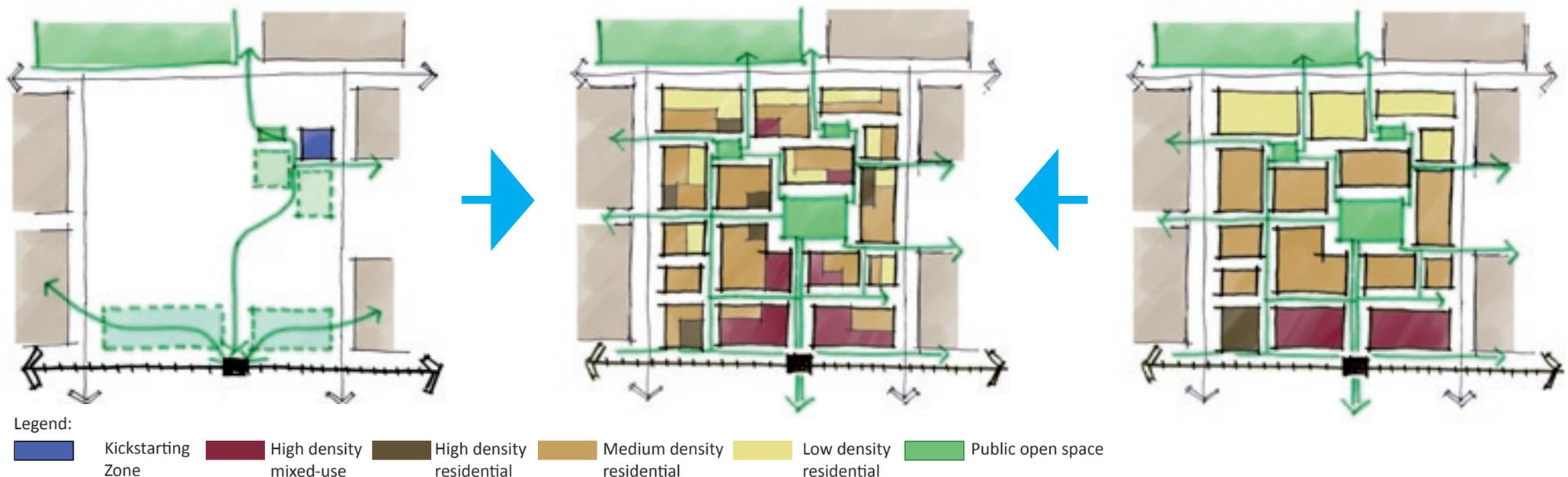
The 'kickstart' approach has emerged from the following considerations:

- Interventions are required to improve quality of life conditions in already commenced strategic residential development areas;
- The overall marketability of areas which are currently at a standstill, requires attention to deliverability and improvement of the current housing environment to enhance the area's image and optimise delivery and value of planned infrastructure; and
- The review and adjustment of policy, if it were necessary, may take time to impact on current housing delivery.

6.2 OBJECTIVES

In applying the Kickstart Incremental Development Approach, the overall objectives which need to be achieved are:

- Seek short term and immediate intervention in housing delivery in strategic residential development areas;
- Deliver a phased and incremental development strategy linked to overall density target delivery; and
- Secure the incremental increase in density as part of a managed approach to the area's development strategy.



6

6.3 KEY ELEMENTS

Key identifying elements of the Kickstart Incremental Development Approach are:

- Identification of a 'kickstart' location on designated lands;
- Flexibility in the lower density range with traditional housing typologies to facilitate marketability of early development;
- Increase density incrementally to achieve overall density targets;
- Retain key high density locations for later development phases;
- Retain policy in relation to sustainable residential communities;
- Seek mixed densities through an area securing a mix of housing typologies, and facilitating a mix of tenures, through each stage of development;
- Secure quality of development through all stages;
- Managed key connections to existing hubs (transport, educational, commercial etc.);
- Managed approach to delivery of the overall development including vacant lands; and
- Develop the 'kickstart' approach as an intrinsic element of an overall managed plan for delivery of the Strategic Residential Development Areas. The 'kickstart' approach will inform the early stages of the plan's delivery, allowing flexibility of approach, however, the ultimate objectives and target densities must be achieved in the roll-out of the plan. In addition, the existence of an overall plan will mitigate against the risk of opposition from early occupiers to later phases of development.

6.3.1 Issues for Consideration in Applying the 'Kickstart' Approach

In order to gain maximum impact from the 'kickstart' approach, consideration of where it is applied on a site is of critical importance. As a key part of a phased development approach, it is essential that the 'kickstart' location has the ability to achieve incremental development on adjacent sites. This is likely to be facilitated where there are a small number of land holders, with which to form agreements, and achieve consistency in approach. Where multiple land holders co-exist, agreements can be reached but with consideration of factors such as ability of the land holder to deliver in the short to mid term, locational attributes of the land holders lands in relation to achieving maximum impact from the 'kickstart' mechanism etc.

The 'kickstart' development is designed to improve the marketability of the area where it is located, providing the market with the type of units currently being sought. It is intended that it would improve the existing built environment, achieving an overall enhancement in liveability, and engendering a sense of community for both new and existing residents. Within this, it is essential that design of the kickstart development does not put excessive pressure on the local authority in future maintenance terms.

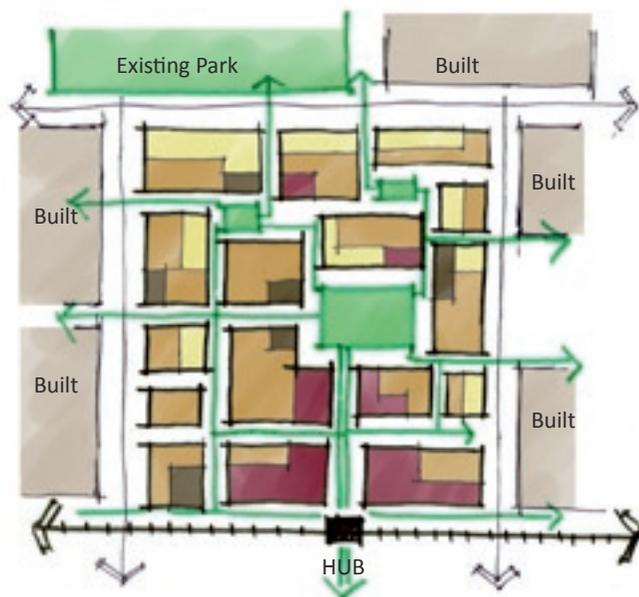
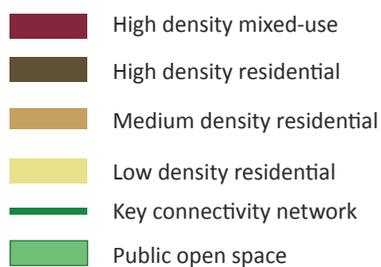
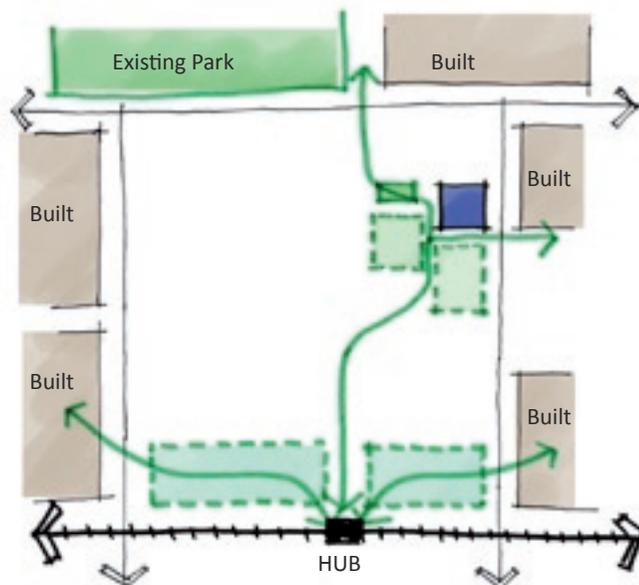
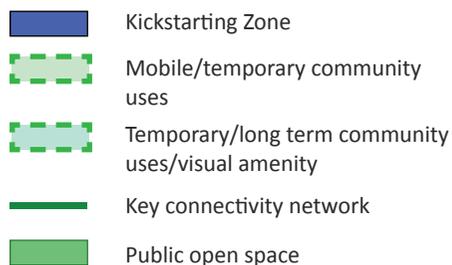
The provision and management of temporary uses on sites may be appropriate in some locations, where they can effectively serve to animate an otherwise unbuilt area within a development. However, in order to ensure that these uses are indeed temporary, consideration as to the most appropriate use mix for an area is required, and an understanding among the community from the outset, that the temporary use will be relocated (or ceased) once development is ready to proceed.

The 'kickstart' approach may not be applicable to all locations. The following issues require consideration in seeking to apply the model:

- Level of residential / commercial mix planned for the location;
- Level of development achieved to date including infrastructure delivery;
- Profile and location of the lands (e.g. it is unlikely to be suitable for city centre lands);
- Development of town centres within residential development areas will require a degree of flexibility to ensure that they can be provided in an incremental way and at an appropriate density;
- Overall density planned; and
- Degree of land ownership segmentation.



Temporary community uses



6.3.2 Criteria for Identification of a 'Kickstart' Location

A number of 'kickstart' locations can be identified in a residential development. Each should satisfy the following criteria:

- Optimises existing infrastructure (social and physical);
- Seeks to minimise early infrastructure costs;
- Enhances existing built development through delivery on adjacent vacant sites;
- Contributes to connectivity in the existing development; and
- Has associated adjacent sites appropriate for next stage development with incrementally increased density targets.

6.3.3 Delivery

Following from the kickstart location, and building on the marketability of the development put forward, adjacent lands are identified for an incremental increase in density, gradually delivering a wider mix of housing typologies than the 'kickstart' area itself.

The extent of the 'kickstart' development area will require to be determined specifically for each area. However, it will be influenced by factors such as funding ability, land ownership, scale of the development area, existing site conditions, and should be determined by the responsible planning authority in agreement with the relevant land holders. This agreement will form the basis of future development delivery at incrementally increased density to allow overall density targets to be achieved.

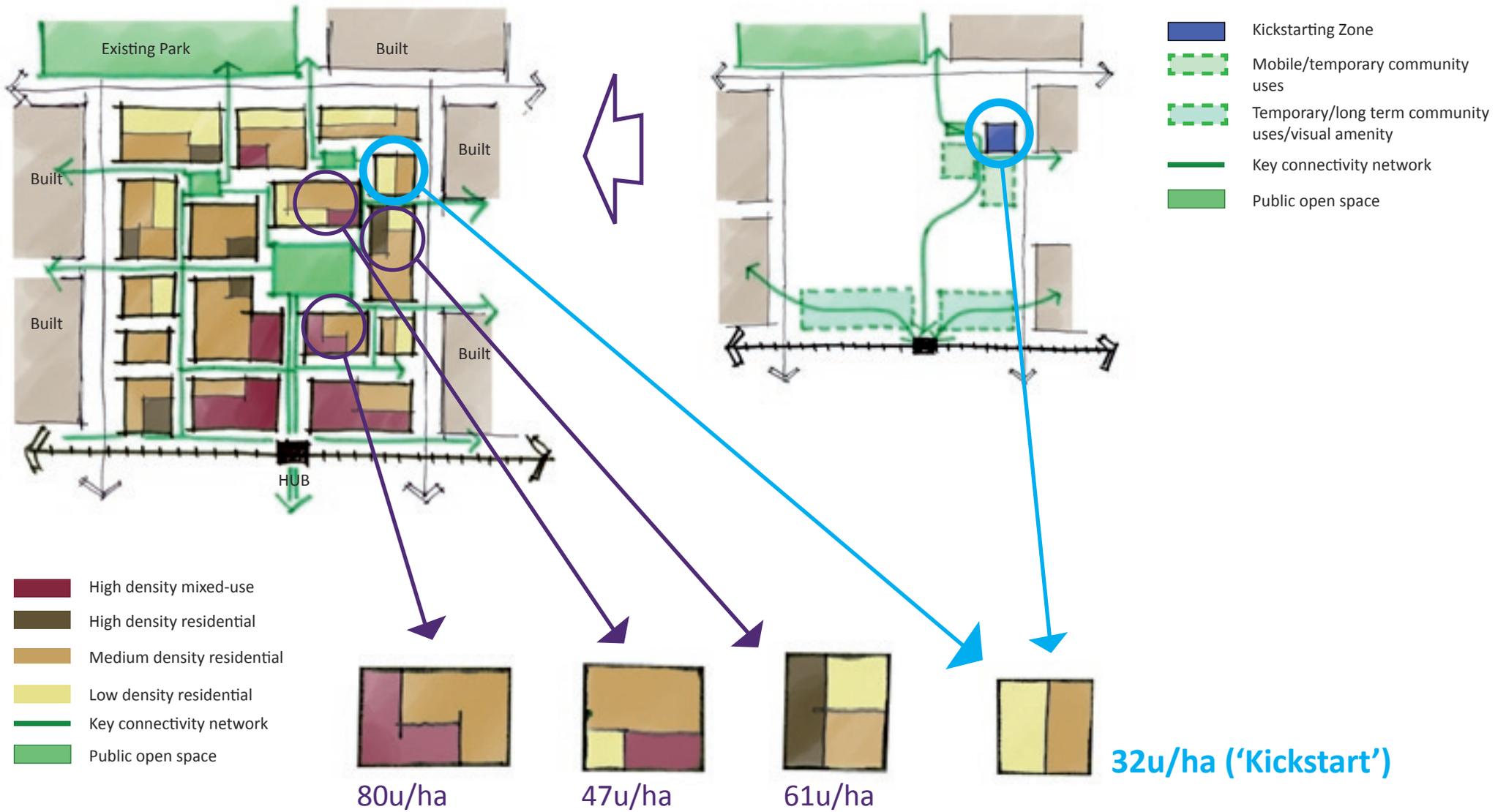
6.3.4 Application

The following diagrams illustrate the application of the kickstart approach to a particular site, with:

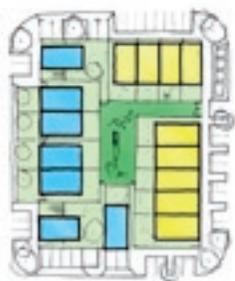
- Identification of a 'kickstart' location;
- Application of an incremental increase in density;
- Alternative 'kickstart' patterns of housing layout;
- Phased 'kickstart' development; and
- Overall delivery.

6

Incremental Density Increase



'Kickstart' Alternatives

**PATTERN A**

Area: 0.50ha

16 units

86 bedspaces

3 no detached (7 bedspaces each)

4 no semi-detached (5 bedspaces each)

9 no terraced (5 bedspaces each)

Density: 32 units/ha**172 bedspaces/ha****PATTERN B**

Area: 0.92ha

33 units

152 bedspaces

12 no semi-detached (5 bedspaces each)

4 no terraced (5 bedspaces each)

9 no apartments (4 bedspaces each)

4 no duplexes (5 bedspaces each)

4 no apartments above (4 bedspaces each)

Density: 36 units/ha**165 bedspaces/ha****PATTERN C**

Area: 0.54ha

21 units

101 bedspaces

4 no semi-detached (5 bedspaces each)

9 no terraced (5 bedspaces each)

4 no duplexes (5 bedspaces each)

4 no apartments above (4 bedspaces each)

Density: 38 units/ha**187 bedspaces/ha****PATTERN D**

Area: 0.89ha

34 units

166 bedspaces

10 no semi-detached (5 bedspaces each)

16 no terraced (5 bedspaces each)

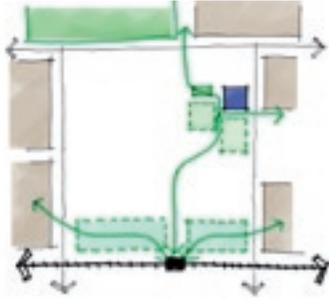
4 no duplexes (5 bedspaces each)

4 no apartments above (4 bedspaces each)

Density: 38 units/ha**187 bedspaces/ha**

6

'Kickstart' Development - Initial Phase

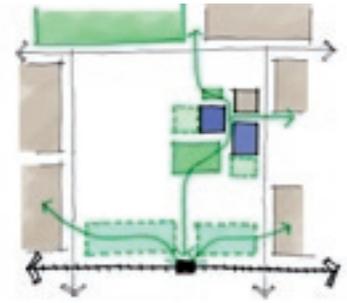


A

Area: 0.58 ha
12 terraced
6 semi-detached
3 detached
Total: 21 units
Density: 36u/ha



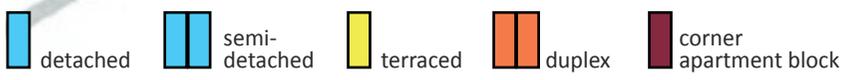
'Kickstart' Development - Next Phases



A
 Area: 0.58 ha
 12 terraced
 6 semi-detached
 3 detached
 Total: 21 units
 Density: 36u/ha

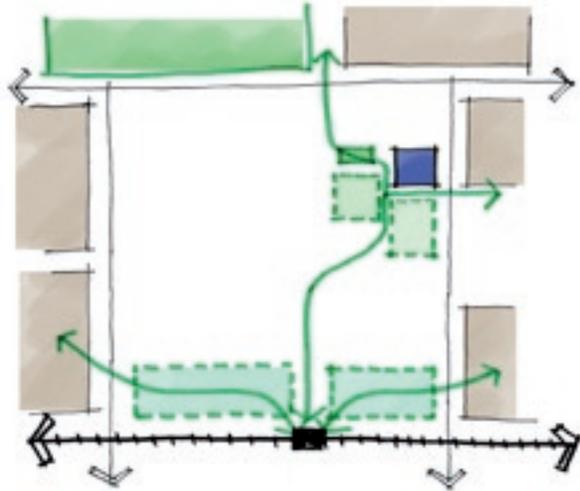
B
 Area: 0.6 ha
 25 terraced
 6 apartments
 Total: 31 units
 Density: 52u/ha

C
 Area: 0.65 ha
 15 terraced
 4 duplex
 4 apartments over
 14 apartments
 Total: 35 units
 Density: 57u/ha

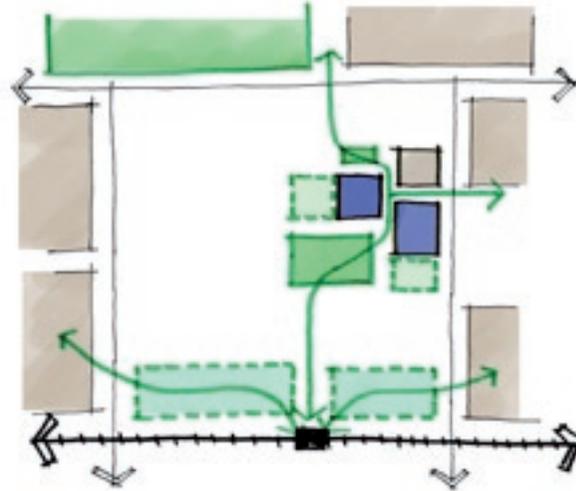


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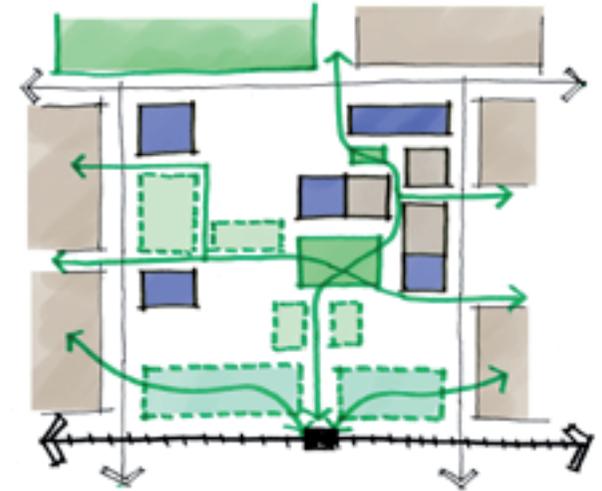
Overall Delivery



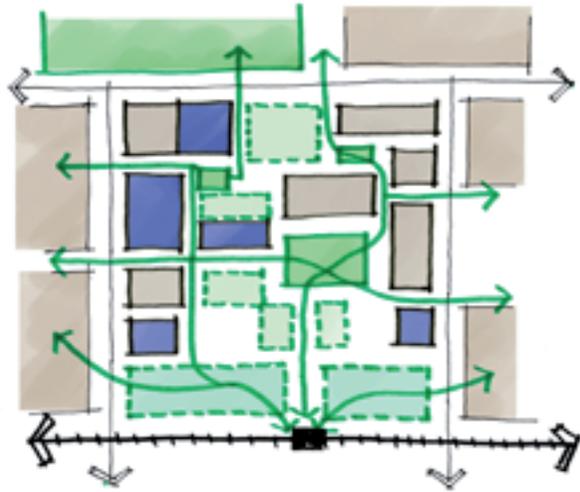
Phase 1 (Kickstarting development)



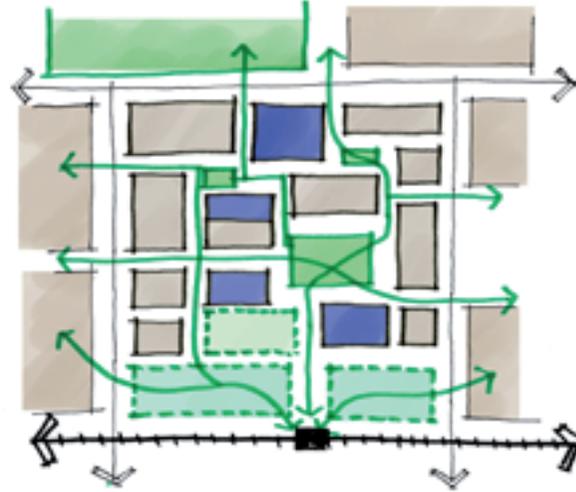
Phase 2



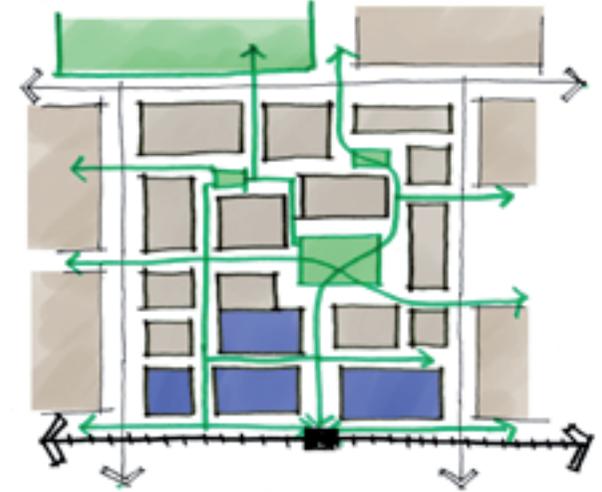
Phase 3



Phase 4



Phase 5



Phase 6

- Current phase
- Developed lands
- Public open space
- Mobile/temporary community uses
- Temp community uses/visual amenity
- Key connectivity network

6.4 CONCLUSIONS

The adoption of a 'kickstart' approach in the Strategic Residential Development Areas will provide a mechanism that permits plan-led initial lower density development, utilising existing infrastructure and connections, which builds up to an increased density over time, incorporating managed public realm delivery and management of adjacent lands. Ultimately, the planned for density would be facilitated with this model of incremental development. The fundamentals of such an approach are:

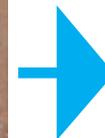
- Achievement of the target densities on a 'full-site' basis.
- A plan-led approach to the incremental delivery of development across the overall site, requiring agreement between the planning authority and land holders;
- Optimising the use of existing infrastructure and leveraging existing facilities;
- Provides for investment in necessary early infrastructure;
- A strong focus on the quality of environs in each phase; and

There are a number of key steps to be taken in order for the 'kickstart' approach to be effective.

Key Steps in Implementing the 'Kickstart' Approach

- Assess and review each strategic residential development area to determine core requirements and extent of planning framework flexibility;
- Identify locations suitable for implementation of the 'kickstart' incremental model as appropriate (as per criteria outlined in section 6.3.2);
- Agreement between planning authority and land holder / developer to be achieved that incremental density increase will follow on adjacent sites (see delivery mechanism section 8.4); and
- Programme of targeted investment by the public sector in the delivery of elements of supporting infrastructure, and, critically, in providing for necessary key infrastructure at the early stages of development to enhance marketability and liveability.

The next section of this study will seek to apply the 'kickstart' approach to a particular location as a 'proof of concept': North Fringe-Stapolin in the Dublin City Council and Fingal County Council areas.



7. Proof of Concept



7.1. INTRODUCTION

7.1.1 Objective of 'Proof of Concept'

This 'Proof of Concept' seeks to apply the principles, ideas and concepts developed in this study to an actual location with the purpose of assessing their applicability and robustness. It seeks to assess how higher density residential development can be achieved on a given site.

The Proof of Concept study commences here with an overview of the North-Fringe Stapolin area, an assessment of delivery to date, and of the current planning framework in place. This contextual analysis is required in order to assess how the kickstart approach can be applied to this area.

It should be noted that the Dublin City Council Draft Local Area Plan (and the emerging Fingal County Council Local Area Plan for Baldoyle-Stapolin) takes precedence over this Proof of Concept, and that this assessment is purely for the purposes of demonstrating the 'kickstart' incremental development approach developed in this study. It is not intended that this analysis be interpreted as the only means of addressing the issues arising in the development of North Fringe-Stapolin, nor should it detract in any way from the approach taken by Dublin City Council (nor Fingal County Council) in this area. It represents one possible approach utilising the concepts derived in this study. In addition, this Proof of Concept relates more fully to the Dublin City Council area of North Fringe, than to the Fingal County Council area of Stapolin, which is referenced purely for contextual purposes.

Overview

North Fringe-Stapolin area was selected as a 'Proof of Concept' site as it qualifies as a Strategic Residential Development Area in Dublin, both in terms of the criteria of this report, and in city strategy terms. In addition it incorporates many of the issues associated with the residential development market, as outlined in chapter 3 of this study.

North Fringe-Stapolin is a planned urban community intended as a new residential location for the growing Dublin population at the border of Dublin City Council and Fingal County Council areas. It is based on sustainability principles utilising rail based public transport, supported by a Quality Bus Corridor.

It is intended that the area would achieve higher density residential development than the neighbouring low density suburban housing estates such that:

- It can be effectively served by public transport, reducing the need for car-based travel;
- To ensure that a range of community services and amenities are provided and supported at an early stage in the rollout of the development;



- To ensure that a range of commercial services can be supported by a critical mass of population in the immediate area;
- The need to travel for essential day-to-day activities is reduced; and
- A range of housing types and tenure is secured to ensure a sustainable community develops over the long term.

Criteria

The criteria used for selecting North Fringe-Stapolin as the location for testing or applying the principles and concepts developed earlier in this study are outlined below. These criteria can be equally applied to other strategic development areas within Dublin, but are considered particularly pertinent to the North Fringe area, given its level of development and relevant attributes, being:

- High density housing expansion zone within the Dublin area;
- Rail based public transport location, through the provision of a new rail station on the existing DART line at Clongriffin;
- Extensive areas of housing and commercial development built and occupied;
- Extensive site areas unbuilt (with hoarding or fencing, leading to a compromised public realm and living environment);
- Incomplete connectivity through the site, reducing the potential to exploit the public transport infrastructure provision;
- Action Area Plan / Master Plan guided development to date; and
- Targetted to accommodate significant population growth in the Dublin area.

Delivery

The objective is to develop an approach to delivery of housing which meets:

- Planning policy requirements;
- Proper planning & development of an area;
- Short and mid term funding restrictions and market trends;
- Creation of sustainable residential communities; and
- Successful place making criteria.

This is explored through:

- A phased approach to a development strategy;
- Initial relaxing of density targets;
- Introducing a broad mix of housing patterns and typologies through almost all stages; and
- Development in the short to mid term that complements higher density nodes in the longer term, achieving overall density targets.

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A range of housing strategy alternatives were considered within the overall market and national policy context. These alternative strategies included:

1. Permitting development at a lower density than currently planned;
2. Permitting development at a lower density than currently planned on an incremental basis as part of a rephasing strategy for areas already planned;
3. Altering the layout of some housing areas so that the overall densities originally proposed can be delivered within a different mix of net densities and housing types; and
4. Rebalancing of densities proposed more evenly across sites to avoid low to high density locations.

7.2 OVERVIEW ASSESSMENT OF STATUS OF NORTH FRINGE-STAPOLIN

7.2.1 Principles & Objectives

Clongriffin-Belmayne (North Fringe)

In June 2012 Dublin City Council published a draft Local Area Plan (LAP) to provide a framework for the proper planning and sustainable development of Clongriffin-Belmayne area.

The LAP supports the main aims and objectives of previously developed plans, including the Dublin City Development Plan 2011-2017 (and earlier development plans), and the Action Area Plan (2000), and aims to focus on policies and mechanisms that enable the delivery of necessary physical, social and environmental infrastructure for the area.

The stated aims for the North Fringe lands (Dublin City Development Plan 2005-2011) which are still relevant are:

1. To create a highly sustainable, mixed use urban district, based around high quality public transport nodes, with a strong sense of place;
2. To achieve a sufficient density of development to sustain efficient public transport networks and a viable mix of uses and community facilities;
3. To establish a coherent urban structure, based on urban design principles, as a focus for a new community and its integration with the established community; and
4. To promote the creation of a high quality public domain by establishing a high standard of design in architecture and landscape architecture.

The **Key Principles of Urban Design** proposed by the draft 2012 LAP include:

- Consolidation;
- Integration and Connectivity;
- Diversity and Adaptability;
- Legibility and Identity;
- Environmental Responsiveness; and
- Streetscape and Design.

Key elements of the draft LAP include the following aims in relation to transportation within the area:

- Delivery of a green route connecting Belmayne with Clongriffin via Fr Collins Park and providing an important walking and cycling corridor for the area;
- Delivery of a connection across Rail Street into the Baldoyle LAP area to improve integration between the City Council and Fingal lands; and

Density

With regard to density, the draft LAP proposes a design-led approach in order to achieve the optimum use of land resources and investment in infrastructure. The draft LAP follows the guidelines published by DoECLG on *Sustainable Residential Development in Urban Areas* and states that a general minimum net density of 50 units per hectare or 250 bed spaces per hectare should be achieved subject to appropriate design and amenity standards in the LAP area.

Challenges

The Local Area Plan recognises that a number of challenges currently exist within the area. They include:

- A very limited relationship among the different forms of space and land use;
- Poor integration within surrounding housing areas;
- Vacant sites;
- The existence of physical barriers that impinge on the area's visual amenity;
- Barriers to permeability within the area; and
- Poor pedestrian environment.





Baldoye-Stapolin

Fingal County Council are currently preparing a Local Area Plan (LAP) for Baldoye-Stapolin, which is intended for adoption in 2013.

Key objectives underpinning the development of Baldoye-Stapolin general area are set by the current Fingal Development Plan (2011-2017), and include:

- Improve, strengthen and consolidate the role of the existing centre (Baldoye) while promoting the provision of a range of facilities to support the existing and new populations making full use of sustainable transport practices;
- The neighbourhood centre (of Stapolin) forms part of a mixed use scheme on the old racecourse lands but is currently undeveloped. The proposed centre comprises c 9,000 sq m. of retail floorspace and a range of other non-retail uses and services. The centre will provide direct access to the western side of the railway where further retail and commercial uses are planned within Dublin City's administrative area at Clongriffin; and
- Facilitate retail and services to meet local needs at Stapolin.

7.2.2 Development to Date

The Draft Local Area Plan (LAP) for Clongriffin-Belmayne sets a clear picture of the level of development of the lands at North Fringe to date. Approximately 3,400 homes have been completed in the Clongriffin / Belmayne area. Completed developments include mixed use residential and commercial developments at Northern Cross and residential and mixed use developments at Belmayne and Clongriffin.

The first planning permissions for development at the North Fringe were granted in 2002 and 2003 (planning application register references 0132/02, 0354/02 and 4315/03). Since the first planning applications, there have been approximately twenty-four subsequent applications granted for the area of Clongriffin and approximately sixteen subsequent applications granted for Belmayne over the period 2002-2009. The approximate densities of the main applications for development at North Fringe range from 60 units per hectare up to 175 units per hectare. In terms of the typology of these applications, 2 bed apartments dominate with the proportion of such unit types ranging between 49% and 70% of the units granted. Three bed units account for approximately 10 – 20% of the units. In terms of the typology of what has been actually been built, a larger proportion of the houses permitted, have been completed and are occupied.

Many of these permitted developments have more recently sought design amendments and in some examples alternative uses have been proposed (such as a nursing home development in lieu of residential uses in part of Clongriffin). Also in Clongriffin an application was lodged in 2012 for development on the site to the east of Father Collins Park. The proposed development represented a revision to the parent application on the lands (Reg. Ref. 0132/02) which permitted the

development of a large mixed-use development including over 3,200 residential units. The revised application sought to omit 213 dwellings and replace them with 147 dwellings. The breakdown of this proposal is set out in the table below:

Original Application 0132/02	Revised Application 2405/12
Omit	Replace
21 X 2 bed house	
71 X 3 bed house	47 X 3 bed house
1 X 4 bed house	36 X 4 bed house (2 & 3 storey)
24 X 1 bed duplex	1 X 1 bed duplex
78 x 2 bed duplex	2 X 2 bed duplex
6 X 3 bed duplex	2 X 3 bed triplex
12 X 3 bed duplex	3 X 1 bed apartments
	56 X 2 bed apartments

Summary of example revised planning application

This application represents a move towards larger houses and a considerable reduction in the number of duplexes proposed as part of the specific development.

Other development sites with planning applications lodged and developments completed include the Northern Cross (mixed use residential, retail, hotel and commercial development), Clare Hall (shopping centre and apartment development), Priory Hall (mostly residential with ground floor retail/live work units, currently unoccupied due to fire safety issues), the residential neighbourhood of Beupark, Phase 1 of Belmayne, and sections of Main Street Clongriffin.

Summary of development delivered to date - Clongriffin-Belmayne

- Approx 3,400 homes;
- 41,000sq.m of commercial development;
- Clongriffin Rail Station;
- Two Primary Schools;
- Father Collins Park;
- Park and Ride at Clongriffin; and
- North Fringe Sewer and North Fringe Watermain Projects.

In a number of cases on the larger sites within the area, the economic downturn has resulted in only the initial phases of development being completed. As a result there are large areas of incomplete development and vacant commercial and retail units.



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Baldoye-Stapolin

On the Fingal (Baldoye-Stapolin) side of the North Fringe (east of Clongriffin train station) there is a stated residential capacity of 2,600 units. To date there are approximately 350 existing occupied apartments and almost 200 existing occupied houses. Extant planning permissions exist for in excess of 1,000 apartments and over 500 houses.

Development in Baldoye-Stapolin that has been delivered includes the newly developed areas of Myrtle and Red Arches which contain a mix of residential units, with traditional style houses, town houses and apartments based around central semi-private courtyard areas. The development of many of the original key design elements including the commercial area adjacent to the railway station, the civic area and the main boulevards have not yet been delivered.

An application was lodged with respect to the lands at Baldoye-Stapolin in August 2011 by Regents Park Development Ltd for 400 homes, including 185 three-bedroom apartments, 49 five-bedroom houses, 14 townhouses and 61 two-bedroom apartments. The application was refused by Fingal County Council and is currently under appeal with An Bord Pleanála.

7.3 MARKET VIEW

7.3.1 Supply

As a snapshot of supply in the Clongriffin area, DAFT property website listed (September 2012) 16 properties for sale, 6 apartments and 10 houses; it also listed 47 apartments available to let, 25 of which are 2 bed apartments.

MyHome.ie property website (September 2012) listed 14 properties for sale being 7 apartments and 7 houses; it also listed 31 properties to let, 19 of which are 2 bed apartments.

7.3.2 Values

In July 2012, quoting sales values for apartments and houses in the North Fringe area are typically in the order of €2,000 – €2,400/m². Quoting prices for apartments were at the lower end of this range.

Rental values were showing modest increases year on year e.g. a typical 2 bed apartment rents for approx. €950 - €1,050 per month up from €900 12 months previously. As a comparison, a city centre 2 bed apartment achieved €1,000-€1,300 per month.

In summary, there appeared to be demand for all types of property in the rental market in this area. In addition, the sales market is described as steady.

Ease of access to public transport, schools, retail and amenity are all strong attractors to a broad range of occupiers e.g. single professionals, families.

7.4 PROOF OF CONCEPT APPLICATION

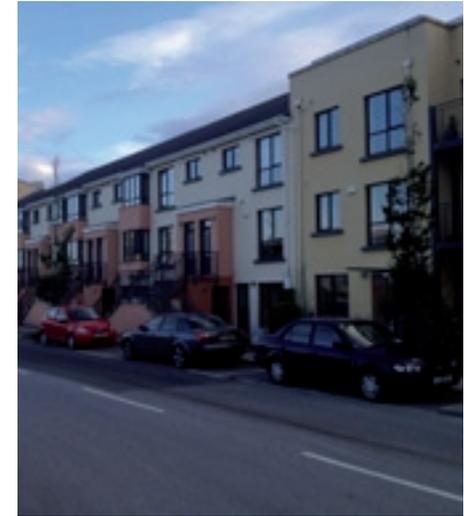
The Proof of Concept exercise seeks to implement the principles, concepts and ideas emerging from earlier phases of the study. The application of these ideas to an existing urban environment challenges the scope of this study and raises a wide range of issues which fall outside its remit.

Presented in this assessment is an approach to kickstarting development in North Fringe-Stapolin. Many other approaches and options could equally apply. Emerging from this approach, however, are core principles and outcomes that would apply across a range of solutions and approaches.

Principles

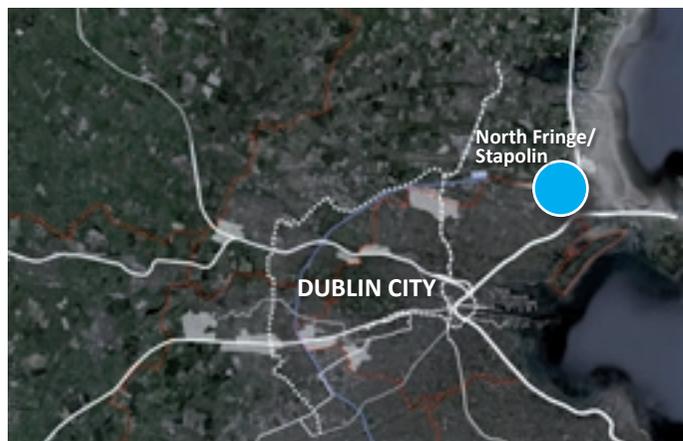
The following principles emerged during earlier stages of this study as key to delivering high quality residential locations, whether in the core city area, edge of city, or greenfield locations. These principles are of particular relevance to North Fringe-Stapolin, in considering how this area can be successfully delivered. These principles are:

- Focus growth in the right places;
- Collaboration between a range of stakeholders / investors;
- Early decision to invest in high quality infrastructure and services as a priority for residents;
- Compact communities to optimise infrastructure;
- Development of stable neighbourhoods. Housing is varied and adaptable with a range of sizes and types provided, and a mix of tenure options to build balanced communities;
- Developers adhere to a 'Quality Programme' which defines:
 - architectural quality;
 - the character of public spaces; and
 - standards for colours, materials, energy and ecology;
- Diversity in building type through use of variety of architects in design; and
- The outdoor spaces are well managed and maintained, through long-term maintenance programmes established at the outset.

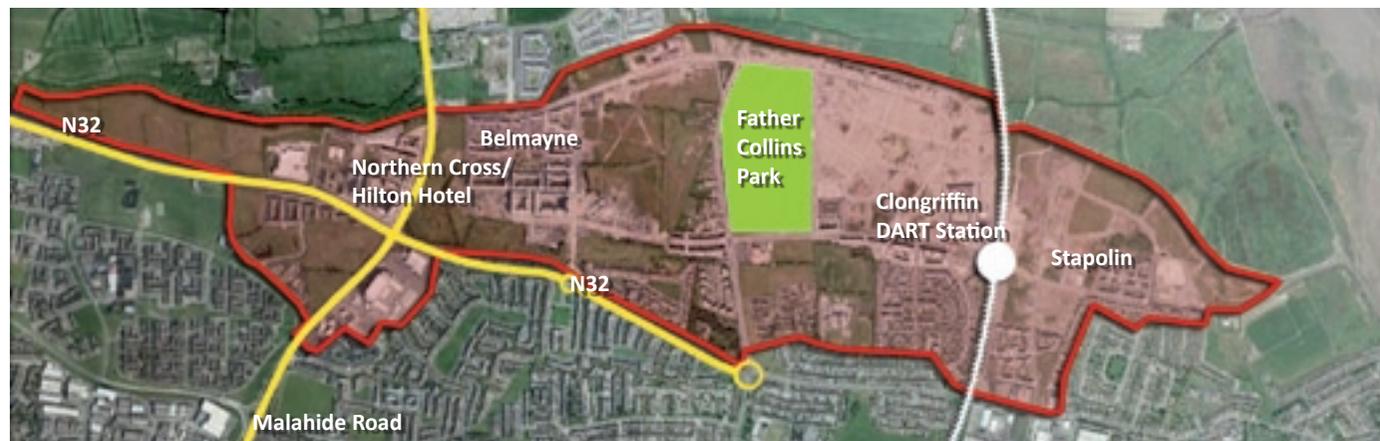


7.5 PROOF OF CONCEPT ASSESSMENT

7.5.1 Site Location and Character



North Fringe / Stapolin Wide Context



North Fringe / Stapolin Local Context



Stapolin Grange Square Park



Clongriffin Square at Rail Hub



Clongriffin DART Station



Clongriffin Undeveloped Lands



Stapolin Undeveloped Lands



Belmayne Local Park



Belmayne Residential Street



Residential Street at Hilton Hotel Area

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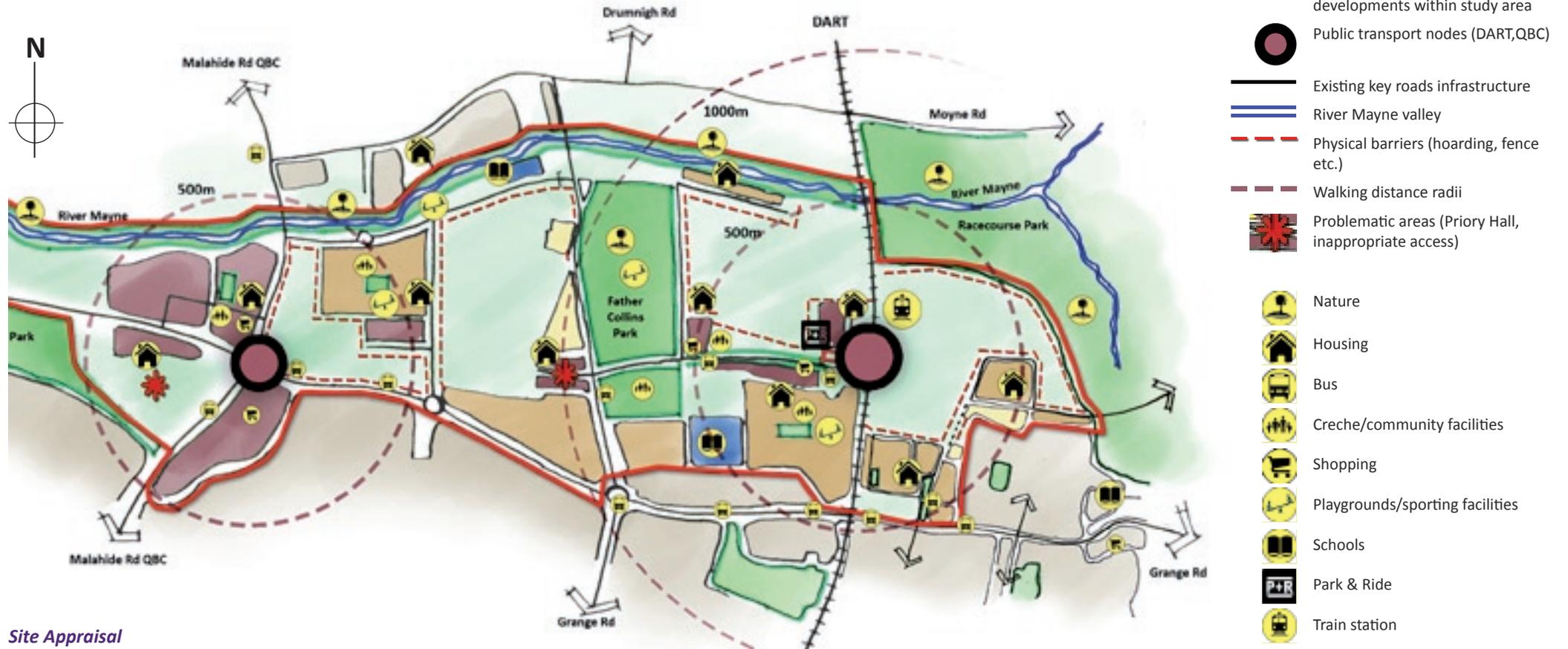
7.5.2 Site Appraisal

Strengths

- Strong pockets of quality residential development;
- Significant area of quality open space in the Father Collins Park;
- New DART station at Clongriffin, at the centre of a new Town Centre, with associated Park and Ride; and
- Planned delivery of a green infrastructure network on the River Mayne, and through the developed areas with a series of community services and amenities, including playgrounds, schools, etc.

Weaknesses

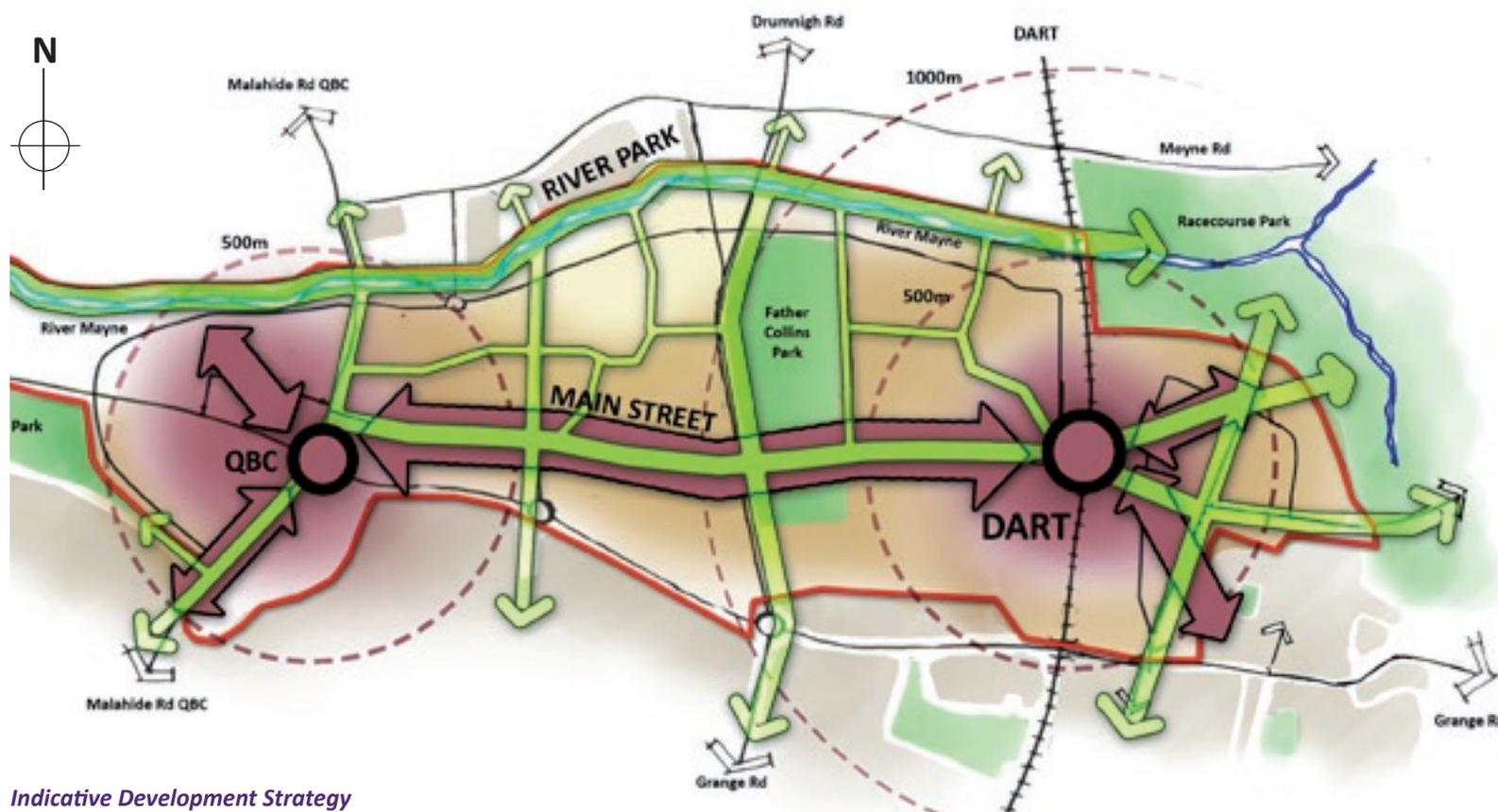
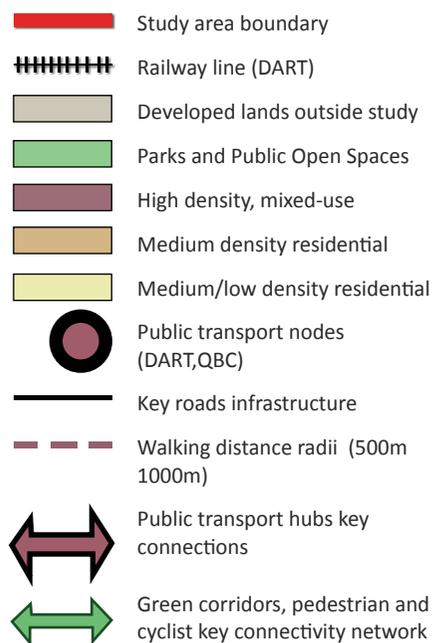
- Undeveloped sites interspersed through the area;
- Lack of connectivity along key arteries (roads blocked / incomplete); and
- Impact of undeveloped lands.



Site Appraisal

7.5.3 Development Strategy

- Strong connectivity between transport hubs;
- Mixed use Main Street to connect through the area;
- Strong linkages through the development between key activity nodes – retail / community / amenities / education etc.;
- Green network to extend to River Mayne Park;
- Mix of densities through the area reflecting the ambition to create a range of housing typologies through each stage of development;
- Specific locational attributes will lead to lower and higher density housing delivery; and
- Linkages eastwards to Stapolin and to the coast.



Indicative Development Strategy

7.5.4 Indicative Master Plan Strategy

The approach taken strongly reflects and works with the existing context, and current and future plans for the North Fringe-Stapolin area. Interventions in this framework are proposed in order to seek short term immediate improvements to the development of the area, and to facilitate a potential kickstart to development here.

Central to the strategy approach put forward here is a phased development strategy, linked to overall density target delivery. Essential elements of this are:

- In response to current market and economic conditions, and in an attempt to 'kickstart' development, consider a reduction in density to deliver more traditional housing units within a phased development strategy of incremental density increase. The objective here is to respond to both developer concerns (funding, marketability, scale of delivery required, and so on) and purchasing trends (mortgage viability, starter home delivery, consumer confidence in large-scale development, and so on);
- Seeking to kickstart development where optimum leverage can be obtained from existing infrastructure (reducing upfront infrastructure spend), existing build (to enhance existing development and provide context for new development), and where maximum connectivity can be achieved between new and existing developments and nodes;
- Management of unbuilt lands, such that in appropriate locations community uses can be considered on a temporary basis;
- Where unbuilt lands sever development or activity nodes, that connections are made through these lands on a temporary basis, but which are managed and inviting; and
- Where lands require to be fenced off, that this is managed, maintained and implemented in the most sensitive manner possible (ie.options other than hoarding should be considered for perimeter fencing).

Density and Housing Typologies

- Retain high density focus along principal arteries and at designated town centre area, adjacent to the rail station;
- Achieve a mix of densities through the area, as appropriate acknowledging specific contexts, objectives and amenity provision; and
- Deliver a range of housing typologies through each stage of development.

Connection

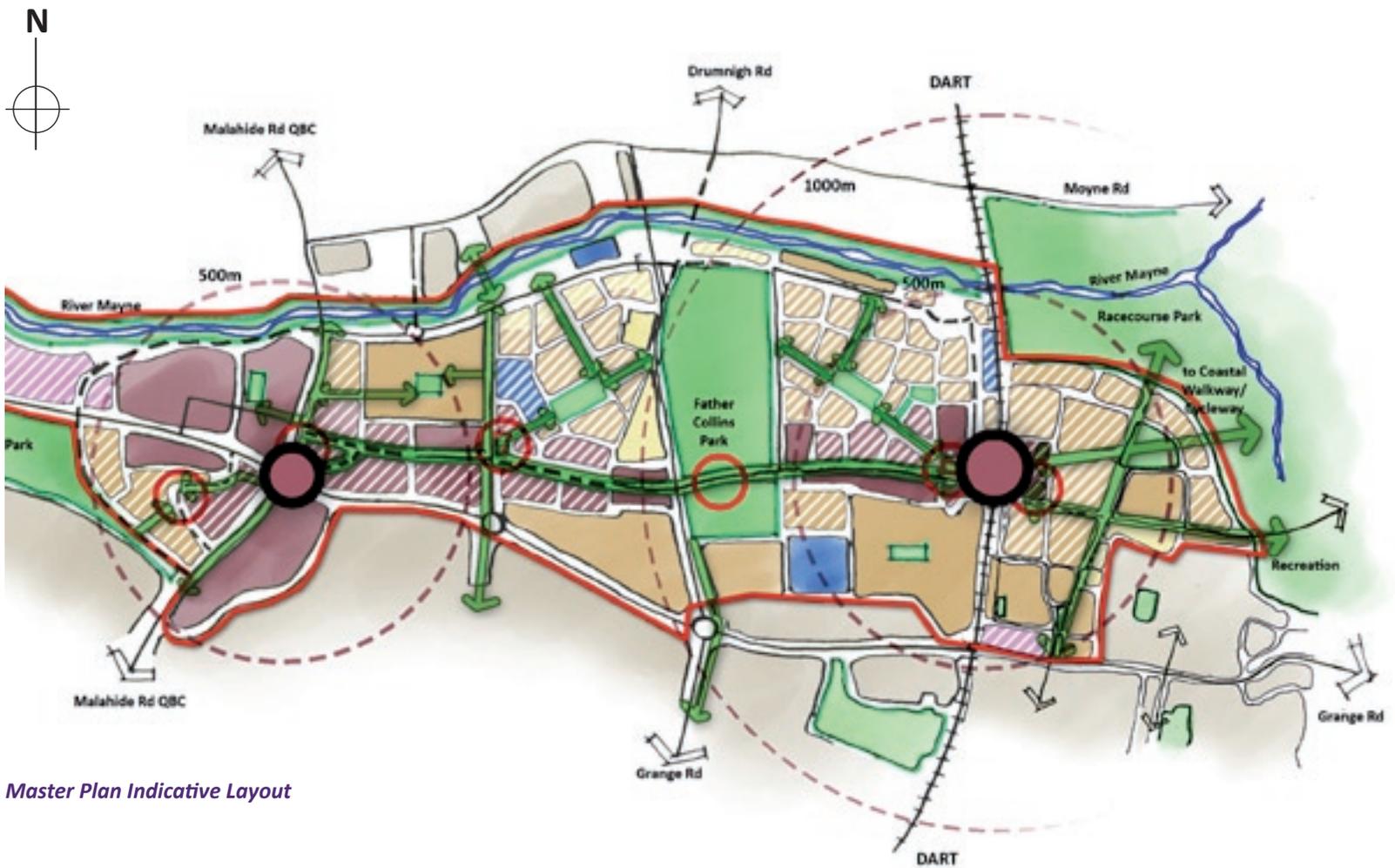
- Green infrastructure strategy to play a key role in connecting areas to central nodes; and
- Connectivity to be enhanced prior to any development taking place.

Profile

- Density range 35-65 / hectare to achieve an average of 50 units / hectare over the area;
- Parking strategy which works with both on street parking and in-curtilage parking with underground parking where high density requires it;
- Open space management – both for formal open space areas and their implementation, but also temporary open space (unbuilt lands); and
- Phasing development strategy which seeks to anchor new development on existing serviced and built areas, commencing with a lower density type of housing, incrementally increasing density to achieve the overall target required.



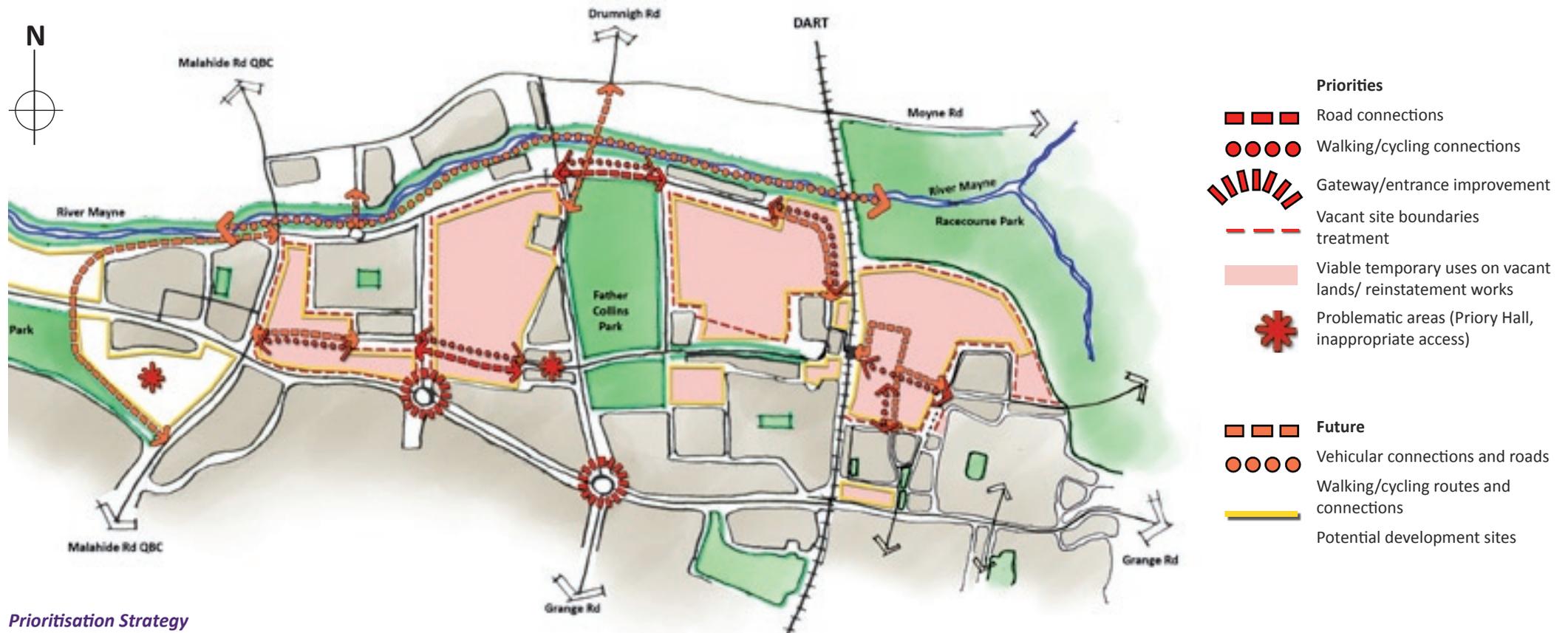
-  Study area boundary
-  Railway line (DART)
-  Developed lands outside study
-  Parks and Public Open Spaces
-  Schools
-  Existing high density, mixed-use
-  Existing medium density residential
-  Existing low density residential
-  Public transport nodes (DART,QBC)
-  Existing key roads infrastructure
-  River Mayne and Racecourse Parks
-  Completed roads
-  Potential green corridors, pedestrian and cyclist key connectivity network
-  Potential high density, mixed-use
-  Potential medium density residential
-  Potential medium/ low density residential
-  Potential commercial
-  Local community focus



Master Plan Indicative Layout

7.5.5 Prioritisation Strategy

- Key connections need to be prioritised either with preliminary pedestrian / cycle connections or with full vehicular connectivity:
 - A strategy to open up Main Street is required;
 - In addition, a key connection needs to be implemented to the north of Father Collins Park from Belmayne through to the Marrisfield development, continued on to Clongriffin Station;
 - To the east of the station connections to the core areas in Stapolin are required, and through to older existing housing developments, such that Clongriffin station's usage can be optimised;
- Unbuilt lands centrally located in Clongriffin - Belmayne and Stapolin require immediate implementation of a managed development approach— either through built form or landscape treatment in order to be integrated into, and contribute to the development of, the urban structure; and
- Key problem sites require intervention in order to reduce their negative impact in the short term, and to give a perception of managed change and control of the area.



Prioritisation Strategy

7.5.6 Potential Indicative Development Site Phasing Models

The site selected for consideration of development phasing is located to the east of Belmayne built area and extends to the west of Father Collins Park.

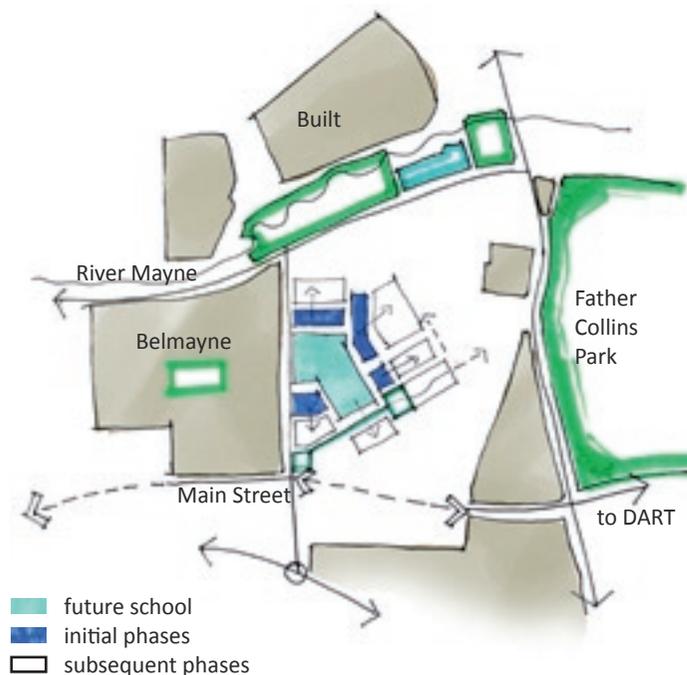
The proposed strategy is to develop at the lower range of the density targets with a short to mid term phasing of development.

This preserves the higher density mixed use profile of Main Street, for example, and other areas to achieve high density mixed use development when the market has improved.

Each of the strategies requires a strong management approach to public open space, and unbuilt areas.

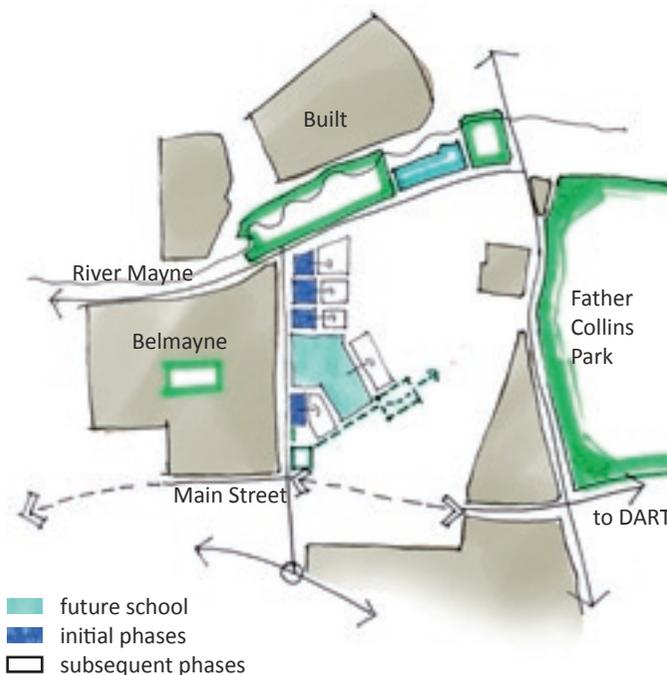


Selected Area Location



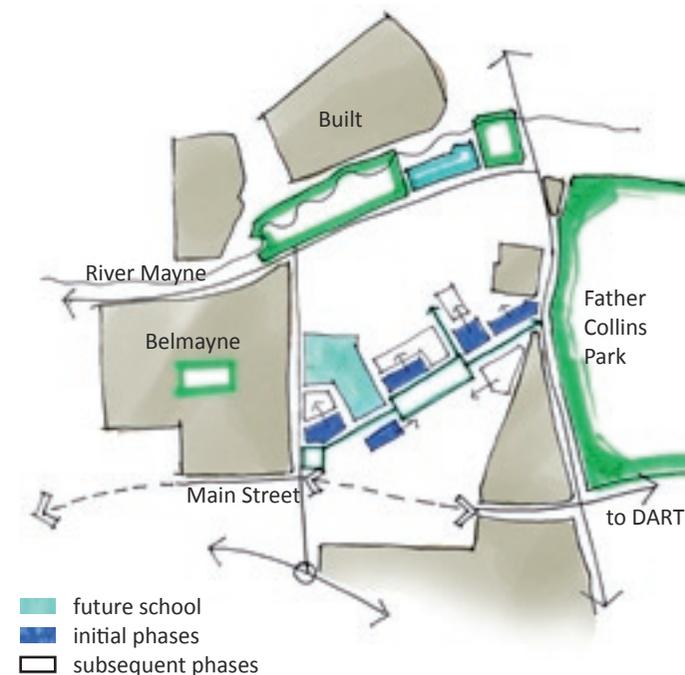
Radial Model (adapted)

Focused development to enable a 'kickstart' of new development extending to an incremental increase in density and wider mix of housing typologies through the site.



Linear Model

Addressing key frontage to Belmayne with mix of housing typologies through the development.

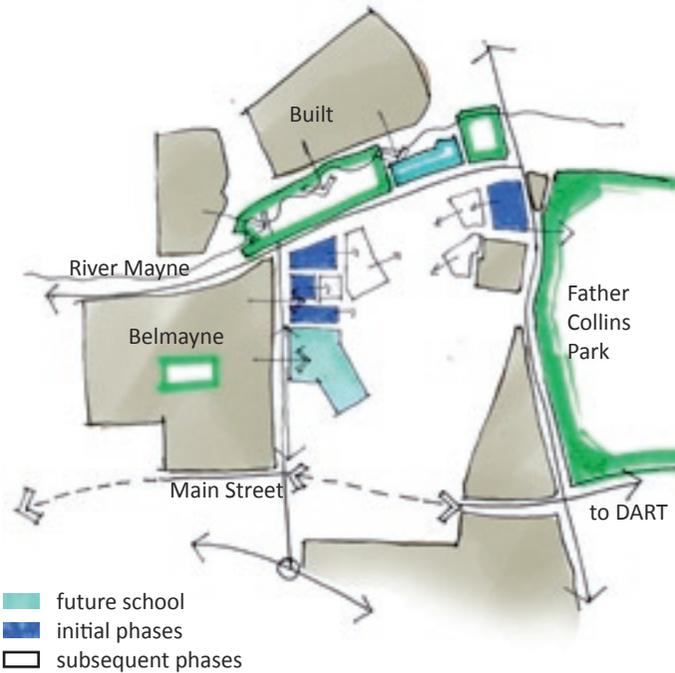


Connecting Hubs Model

'Hubs' here are the new housing at Belmayne and the key community amenity of Father Collins Park, which is currently remote from Belmayne due to the barrier of unbuilt lands.

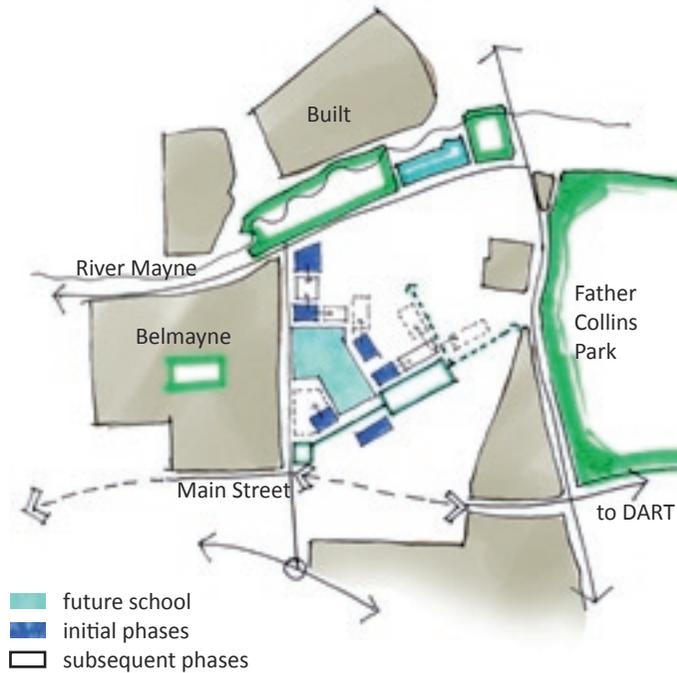


Selected Area Location



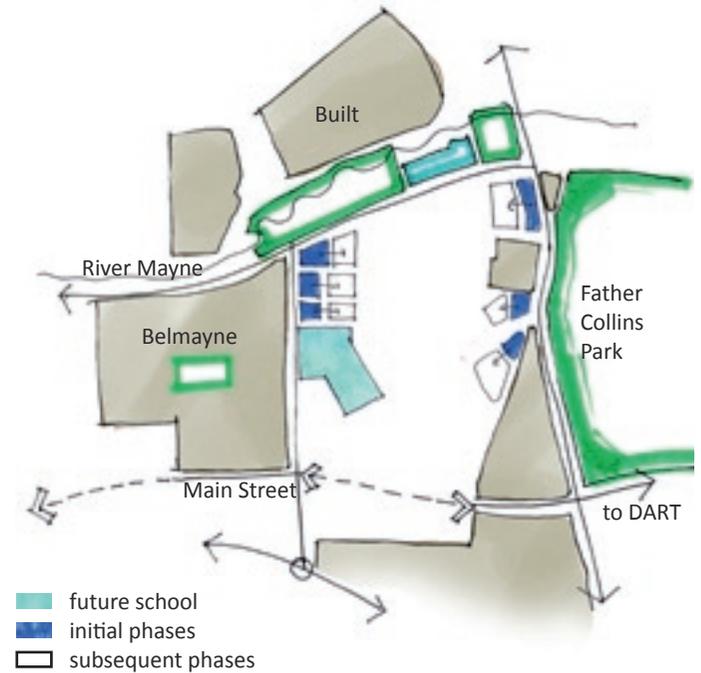
Consolidation Model

Consolidating the edge of the housing/amenity area at north-east Belmayne to connect and reinforce the linkage with the school and the Father Collins Park to the east, which are isolated from the core development area to the south.



Mix Model

Commences with lower range density housing typologies through the site allowing for future insertions of higher density typologies.



Expanding City Model

Development phased to build on each previous build with a view to strengthening use of existing infrastructure.

7.5.7 Kickstarting Development

A key element in this Proof of Concept exercise is to acknowledge the adverse economic and market conditions that currently prevail, and the knock-on effect that this has on the residential development sector. The challenge is how to successfully achieve residential development in this context.

National, regional and local policy supports the development of key or strategic residential areas within the Dublin region, optimising public transport infrastructure investment while creating sustainable residential communities.

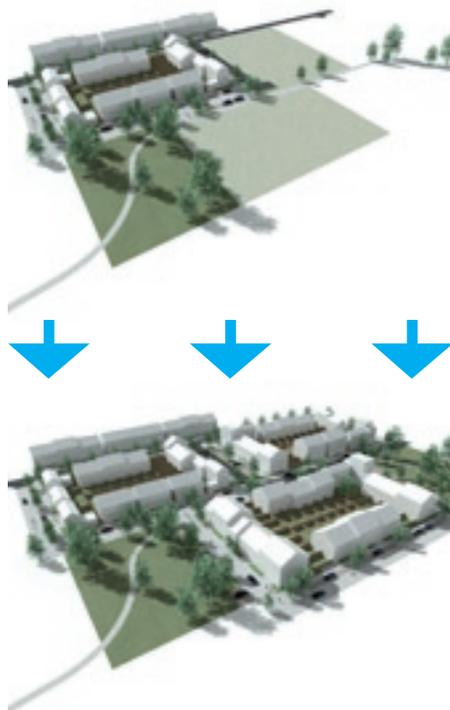
This proof of concept exercise seeks to support this policy and its associated objectives, within the constraints referred to previously.

In addition, this study seeks to address consumer perceptions of large-scale residential development areas, and to introduce a level of certainty to their development, as well as instilling confidence in delivery of quality, amenities, and community.

The approach presented here seeks to achieve the target density for Clongriffin-Belmayne (general minimum net density of 50 units/hectare or 250 bed spaces/hectare), as per the Draft Local Area Plan 2012. However, in meeting what is understood to be current market and funding conditions, the 'kickstart' zone for development allows for a more traditional housing type and mix, and density target (35 units/ha) within a defined area. The intention is that, with time and easing of market conditions, increased consumer confidence in a product, and with public sector commitment to management and delivery, that further incremental development from this 'kickstart' zone would gradually increase density, introduce a wider range of housing typologies, while retaining core high density locations at key development nodes for a future phase. This would permit the overall density target to be achieved in the mid to longer term. The 'kickstart' zone requires to be within a defined master plan area such that the developer and the local authority agree to the incremental increase in density and range of housing typologies, and open space and connectivity strategy, that will complement this first development zone.

Key elements of this approach are as per previously outlined, and are intrinsic to the development of any successful community ie:

- Diverse range of housing types;
- Ability to deliver a mix of tenures;
- Creation of stable and secure communities;
- Quality connections, open space, and public realm;
- Integration with surrounding areas; and
- Delivery of critical physical and social infrastructure.



Description

The 'kickstart' zone example put forward here is the proven "housing square" used in the past with a mix of semi-detached, detached and terraced dwellings and provides an efficient and practical solution to the provision of open space (shared between the residents of the square in this case), car parking (off curtilage) in a housing development and encourages the use of the reduced rear gardens of each dwelling as a "live" space, opening off the dwellings shared open space and with full visual connection between the two.

This type of starter development is very much 'stand alone' in its design, and accommodates a range of options for continued expansion, as illustrated, in order to achieve the overall density target. From this, it is envisaged that further schemes can "plug in" to the expansion points, whether they be housing, terraces, apartments or open space.

These future schemes should increase in density to the 50+ per hectare range if the overall densities of 50/ha are to be achieved. The general pattern and structure of schemes can be similar to those shown with increases in terraced housing and duplexes, where the market can sustain it.



'Kickstart' Zone

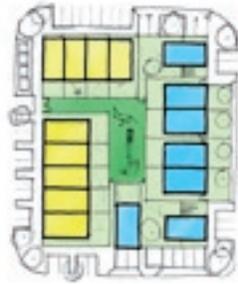


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Incremental Development (Indicative Strategy)

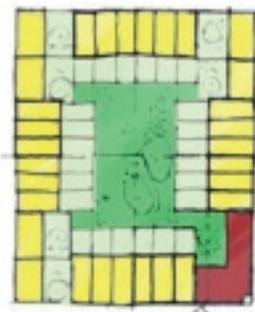
KICKSTARTING ZONE

Area: 0.46ha
 16 units
 86 bedspaces
 3 no detached (7 bedspaces each)
 4 no semi-detached (5 bedspaces each)
 9 no terraced (5 bedspaces each)
Net Density: 35 units/ha
187 bedspaces/ha



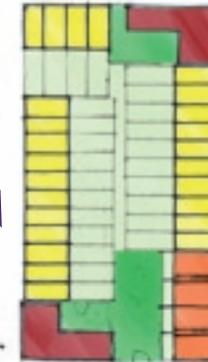
ZONE A

Area: 0.76ha
 36 units
 174 bedspaces
 30 no terraced (5 bedspaces each)
 6 no apartments (4 bedspaces each)
Net Density: 47 units/ha
229 bedspaces/ha



ZONE B

Area: 0.73ha
 45 units
 209 bedspaces
 25 no terraced (5 bedspaces each)
 4 no duplexes (5 bedspaces each)
 4 no apartments above (4 bedspaces each)
 12 no apartments (4 bed spaces each)
Net Density: 61 units/ha
286 bedspaces/ha

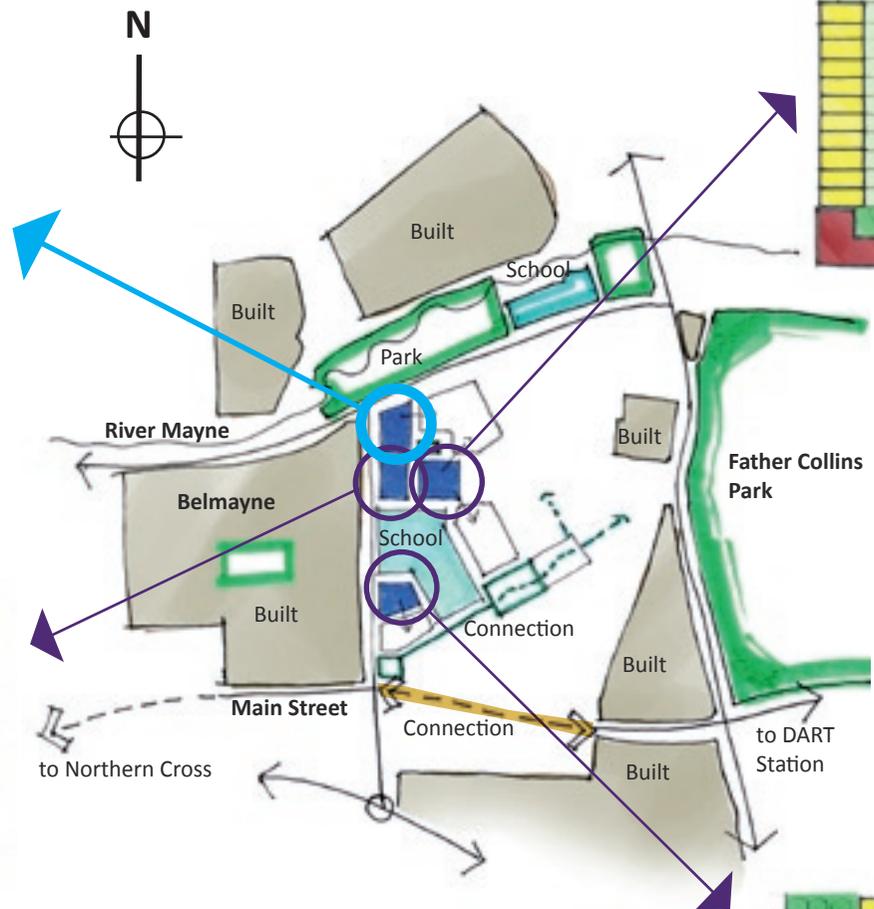
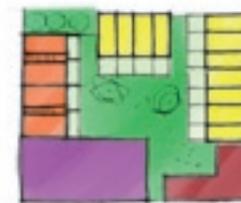


OVERALL:

Average Density:
 approx. 50 units/ha

ZONE C

Area: 0.56ha
 45 units
 195 bedspaces
 11 no terraced (5 bedspaces each)
 4 no duplexes (5 bedspaces each)
 4 no apartments above (4 bedspaces each)
 26 no apartments (4 bed spaces each)
Net Density: 80 units/ha
348 bedspaces/ha





7.6 CONCLUSIONS

The 'Proof of Concept' applied to North Fringe-Stapolin is intended as a demonstration only of the 'kickstart' incremental development approach to catalysing housing development. The analysis is purely for the purposes of this study and is not intended to detract from current policy development by Dublin City Council or Fingal County Council for this area, which takes precedence over this study.

Application of the 'kickstart' approach

This part of the study commenced with an overview assessment of the current status of lands at North Fringe-Stapolin from a policy, delivery, and on-the-ground perspective. Current plans for the lands were assessed, in addition to the status of any planning proposals or permissions pertaining to the area.

An analysis of the site location and character of the area, in addition to an overall site appraisal, was undertaken. This served to inform the study of key strengths and weaknesses in the delivery to date. Stemming from this analysis, an overall site strategy was evolved which largely conforms with the current draft Local Area Plan for the area, and with key objectives for the area. As part of this site strategy, a prioritisation strategy for key interventions was developed.

The next steps sought to establish potential locations for the 'kickstart' incremental development approach to be demonstrated. Development site phasing models were assessed, and a 'kickstart' zone selected for application (it should be noted that there may be several suitable locations on a site suitable for this form of intervention).

The zone selected for demonstration of the 'kickstart' approach responds to selection criteria outlined previously (Section 6.3, pg 39). Central to these criteria is the optimisation of existing infrastructure, both physical and social, therefore minimising upfront investment in the early stages of development. Equally of note in the selection criteria is the ability of the 'kickstart' location to enhance the existing built environment through delivery on adjacent vacant sites, thereby enhancing the quality of living for existing residents.

Following from the 'kickstart' location, and building on the marketability of the lower density model put forward, adjacent lands are identified for an incremental increase in density, gradually delivering a wider mix of housing through the site. A managed approach to delivery and to adjacent vacant lands is required for the area to be perceived as positively developing and achieving its target objectives. The market needs to be assured of build out and delivery of essential services, as per the planning frameworks in place.

The application of this approach to a particular site serves to illustrate how a lowering of density requirements in a given location does not compromise overall

density target delivery. In addition, it illustrates that in fact a broader variety of housing types can be delivered through the development stages, achieving a more robust and sustainable housing environment for a mix of tenure types and household requirements.

Benefits of the Approach

Working with a defined model or approach allows for specific phasing and delivery objectives and targets to be established, within the existing planning framework, and working towards its delivery. The approach seeks to guide the planning authority and the landowner / developer through a difficult housing market and funding environment to the benefit of all. It is imperative that the public sector play a key role in supporting such an approach, particularly in relation to the provision of any key infrastructure required, or maintenance or taking in charge issues.

In this manner, the physical intervention of the 'kickstart' incremental development model would require to be supported at a policy and public sector level, thereby achieving a concerted approach to residential delivery at locations deemed to be a priority in public policy terms.

Core outcomes from this Proof of Concept exercise are:

- Government policy in relation to sustainable residential development remains applicable;
- The lower end of the density range as per Government policy guidelines is likely to be most suitable to the current environment in the short to mid term housing market due to:
 - Funding restrictions related to scale of development, market sensitivities on unit types;
 - Market instability where predictions of future sales quantum and price is very uncertain;
 - Purchaser inability to secure mortgages generally; and
 - Consumer confidence in housing delivery in newly developing areas.
- Flexibility in phasing terms in achieving master plan development ie. phasing principles applied to achieve quality of place, minimising disruption with future phase delivery, and prioritisation of essential services, physical and social infrastructure and amenities;
- Flexibility to address changing demands in an area of this scale, particularly applies to commercial and services mix. This equally applies to tenure mix; and
- Areas which seek short term delivery of very high densities are unlikely to achieve development in this short to mid term, due to the extent of upfront funding required, without significant public sector involvement.



8. Conclusions



8.1 INTRODUCTION

The challenge set out at the commencement of this study was to re-examine and rethink the ways in which the overall objective of securing sustainable residential development in proximity to high capacity transport corridors can be achieved in the longer term, whilst facilitating market demand in the short term. The study sought to identify mechanisms to deliver residential development in strategic residential development areas without compromising quality and policy, taking into account the current economic climate.

The study relates to lands zoned for residential development at a density of 50-plus units per hectare, on rail based public transport corridors, in the four Dublin local authority areas of Dublin City, Fingal, South Dublin, and Dún Laoghaire Rathdown. These strategic residential development areas have been identified as locations for higher density sustainable residential development, through the integration of land use and transportation planning, in accordance with Government policy on Sustainable Residential Development in Urban Areas (DoECLG). They constitute strategic land banks for Dublin for large-scale, primarily residential development, with the ability to accommodate significant population growth in well-serviced, well-planned, and well-connected communities.

Considerable investment has been made by Government to achieve sustainable forms of development to prevent the continuation of the sprawl that characterised earlier decades. Current policy seeks to capitalise on this investment in order to achieve a competitive urban region. Delivering high quality residential development in key locations contributes to achieving this objective.

This study here comprises five broad stages. Following an assessment and analysis of the current situation, issues, and trends in Dublin in relation to large-scale residential delivery, an examination of delivery and design approaches was undertaken, in response to this analysis. Consequently a flexible, integrated approach to 'kickstart' development was recommended, which was demonstrated in a key housing location ie. Clongriffin-Stapolin.



8.2 KEY CONCLUSIONS

Stemming from the research, analysis, and assessment of approaches worked through in this study, the following key conclusions have emerged:

- Government policy in relation to sustainable residential density guidelines remains applicable;
- Government / public sector intervention is required to 'show confidence' in the delivery of strategic residential locations; and
- Flexibility in minimum densities should be considered subject to agreements being put in place to meet overall density targets.

It is the conclusion of this study that government policy in relation to sustainable residential development in urban areas remains applicable, notwithstanding the current economic and financial climate.

It is considered that for Dublin to continue to grow, improve its economic status, and function as economic driver for the country, a coordinated and integrated approach to land use and transport planning must continue to be implemented through national policy.

The significant level of public investment in the strategic residential locations identified in this study, warrants a continued and consistent approach to securing higher density housing delivery at these locations and ensuring optimisation of valuable land banks and public investment in infrastructure. Public sector involvement would assert confidence in these strategic residential locations and enhance desirability in the market.

Within this context, the study concludes that in order to promote and catalyse residential development in locations where public investment has been most intense, then a certain flexibility in the density range of development needs to be introduced in the early stages of delivery. It is critical that this flexibility be conditional on securing higher densities over the entire development area over time, ultimately achieving density targets under the planning framework in place.

The 'Kickstart' Incremental Development Approach emerged from a consideration of the key factors influencing delivery of residential development. This approach is recommended as a flexible model which can be adapted for application to a range of strategic residentially zoned lands. Essentially the 'kickstart' location would seek to optimise existing infrastructure (social and physical), providing for investment in required infrastructure while minimising upfront investment required in the short to mid-term. It is a recognition that development phasing, development mix, or housing typologies alone will not serve to catalyse housing delivery, but that a combined approach, supported by government policy or public sector intervention could achieve this objective in key locations.

8.3 POLICY CONSIDERATIONS

The study proposes that in order for the key conclusions above to be effective in securing their objective, that a range of supporting policy interventions be considered. These proposed interventions emerge as a range of responses to the analysis of current trends and issues section of the study, in addition to the overall analysis of the strategic residential development areas and review of their needs.

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Strategic review of each location establishing what is needed & timing of intervention.

A review of the strategic residential development area land banks will identify required interventions, and will help to guide future development within the areas, in terms of phasing, and catalysts for delivery. These reviews should address:

- How the area can develop in the short & medium term;
- How to drive it forward (interventions required);
- Infrastructure / location / delivery considerations;
- Develop a 'weighting' system for each site;
- Assess the potential of the 'Kickstart' Incremental Development Approach to an area and build out the master plan through an agreed phasing mechanism, focusing on the quality of the environment delivered during phasing.

Prioritisation of strategic residential locations

In order to secure delivery of housing areas where significant public investment has been made, there is a requirement for active public sector coordination to ensure the continued prioritisation of these areas for housing development. This requires:

- Coordinated government / public strategy (ie. direct action and investment) with departments cooperating to deliver required interventions to support the delivery of the strategic residential development areas; and
- Prioritisation of locations that are considered most appropriate for development delivery in the short term.

8.4 PROPOSED DELIVERY FRAMEWORK

This proposed framework to kickstart development in strategic residential development areas in Dublin requires further analysis to make it as robust and as useful a tool as possible, including:

1. Continued application of public policy in relation to Sustainable Residential Development standards;
2. Flexibility in minimum densities to be considered in early stage development, subject to agreements being put in place to meet overall density targets. It is critical that this flexibility be conditional on securing higher densities over the entire development area over time, ultimately achieving density targets under the planning framework in place. This will facilitate the continuance of a plan-led approach to development delivery;
3. Optimisation of existing infrastructure investment where possible i.e. co-locating next phase development with existing built development to:
 - (i) maximise infrastructure delivery to date;
 - (ii) minimise additional early infrastructure costs; and
 - (iii) improve built environment for existing residents;
4. There is a requirement for upfront public funding of identified and required

critical infrastructure to achieve development in key locations, while ensuring quality of delivery. This would seek to enable short and mid term development. This is a core element of the delivery mechanism proposed, due to the tight funding conditions which currently prevail. Public funding of infrastructure would be tightly linked to the agreed delivery of development, as established between the local authority and the landholder / developer. In time, returns on this investment would accrue back to the public sector through development levies and property tax;

5. Achieve agreement between private (landholders / developers) and public interests (local authority / government agencies) in respect of development delivery, in relation to:
 - (i) phasing;
 - (ii) density targets at each phase;
 - (iii) required infrastructure; and
 - (iv) public funding required.

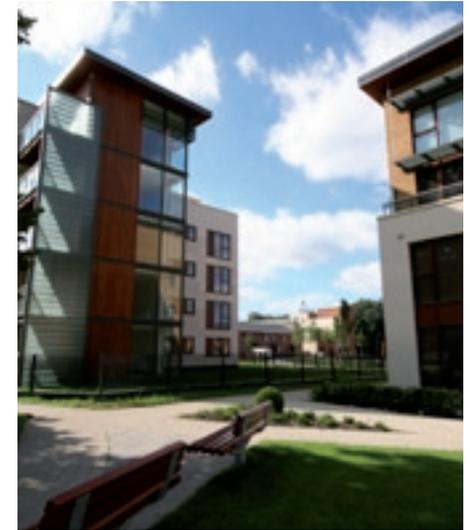
This agreement should take the form of a contractual or legal agreement, and could be achieved through the development control process (ie. condition of a planning permission), through a Section 47 agreement between the relevant parties, financial or other incentives, or other form of legal agreement.

It is considered that this delivery mechanism and agreement would sit within the existing planning framework (whether that be a SDZ, LAP and/or development plan) and would contribute to achieving its overall objectives;

6. A 'package of measures' or programme of targeted investment is recommended to be effected by the public sector, which will coordinate infrastructure delivery and thereby facilitate development in key residential locations.

This approach requires several arms of the public sector to cooperate in achieving development delivery including: Department of Environment, Community and Local Government; Department of Finance; Department of Education & Skills; Department of Transport, Tourism and Sport; National Transport Authority. This is required to 'show confidence' in the delivery of key residential locations in Dublin;
7. Management of the delivery process through the local authority in a similar manner to the delivery of an SDZ through a development agency. This would seek to coordinate funding from government agencies, ensure planning coordination and delivery of the agreed approach, and address on-going maintenance issues until such time as the area is more fully developed and/ or completed.

The delivery framework developed as part of this approach, requires further assessment for implementation, and should be transparent in its intentions and applicability.



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A: Planning Policy Extracts

National Policy in respect of land use and transport has increasingly sought to align land use and transport more closely, given their close inter-relationship. The degree of alignment has been strengthened by legislative amendments and changes to planning policy guidance, including the need for county development plans to comply with a core strategy and be consistent with planning guidelines. In addition, development plans within the Greater Dublin Area will be required to be consistent with the National Transport Authority's transport strategy for Dublin, when this is confirmed by the Minister for Transport.

Transport Policy Framework

There are two key transport policy documents with a direct relevance to the provision and support of high-quality public transport:

- Smarter Travel – A Sustainable Transport Future 2009; and
- Greater Dublin Area Draft Transport Strategy - 2030 Vision (2011).

Smarter Travel – A Sustainable Transport Future 2009

Smarter Travel is the national policy document setting out a broad vision for future transport in Ireland. The aim is that by 2020 future population and economic growth will have to predominantly take place in sustainable compact urban and rural areas which discourage dispersed development and long commuting.

Smarter Travel finds that Transport 21 alone will not be enough to address the unsustainable trends in transport. The document sets objectives to change mind-sets, and alter travel behaviour. This will require the alignment of policies right across Government.

Pivotal to altering travel behaviour is the need to improve the alignment of spatial and transport planning, stopping urban sprawl and urban-generated one-off housing in rural areas. It also identifies a need to introduce carefully targeted fiscal measures to discourage unnecessary use of the car.

Smarter Travel sets down a number of key goals and targets for 2020 - including:

- Green House Gas emissions from the transport sector will be reduced to 2005 levels;
- Total vehicle km travelled by car will not significantly increase;
- Current levels of congestion will be significantly reduced;
- Work-related commuting by car will be reduced from 65% to 45%;
- 10% of all trips will be by cycling; and
- The efficiency of the transport system will be significantly improved.

Greater Dublin Area Draft Transport Strategy - 2030 Vision

The Strategy's role is to establish appropriate policies and transport measures that will support the Greater Dublin Area in meeting its potential as a competitive, sustainable city-region with a good quality of life for all.

The Strategy seeks to meet:

- Economic objectives: by reducing delays and improving journey time reliability, particularly for business travel and the movement of goods, and by improving access to and within town centres;
- Social objectives: by improving safety, reducing travel related stress and reducing the adverse impacts of traffic on neighbourhoods and centres whilst enabling all sectors of society to travel to the destinations they need to reach; and
- Environmental objectives: by giving priority to those means of travel that are less damaging to our natural and built environment.

In relation to land use policy, the draft strategy sets out objectives to consolidate development and minimise sprawl. Dispersed patterns of development will be redressed through a process of development consolidation and the promotion of an appropriate mix of land uses within areas that bring people closer to their needs and allow a high emphasis on walking, cycling and public transport.

Development densities should be higher in designated areas, where public transport accessibility is good, in order to support public transport use, cycling and walking as transport choices. In addition, intensive development should also take place in areas well served by rail. Development should take place at these locations in advance of other locations. The Strategy identifies that mixed use development will be the primary pattern of growth in all areas, with an emphasis on commercial uses in centres, and on residential uses in other areas served by public transport.

The Strategy sets out measures to be addressed in Lands Use plans in the region.

Development plans and Local Area Plans should ensure that:

- *There is a sequential approach to development whereby lands which are most accessible by public transport are prioritised for growth;*
- *Growth in other areas will be limited to that which cannot be accommodated elsewhere in terms of spatial or social characteristics;*
- *Densities will be increased in order to support public transport, walking and cycling with the following considerations:*
 - *Substantially higher densities in Dublin City and at Designated Town rail stations;*
 - *Rail stations in District centres will be the focus of higher densities;*

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- General increase in densities in all areas where existing or planned public transport accessibility is good;
- Infill areas in existing centres as a priority for increased densities; and
- Well-designed neighbourhoods of high architectural quality with dwelling sizes and layouts which provide good quality liveable homes in attractive residential environments; where open space, health and recreation needs are met.
- Mixed use development will be the primary pattern of growth in all areas:
 - In Dublin City, Designated Town centres and in areas around rail interchange points there will be a greater emphasis on commercial development; and
 - Development around other rail stations will be predominantly residential with local level commercial activities provided.
- The national Smarter Travel objective of achieving the 55% target share of all trips by a combination of public transport, walking and cycling is achieved;
- They coordinate with the DoEHLG and DoT policies to ensure there is a homogeneity between the urban centres designated in future plans and strategies (covering population settlements, employment, retail, and other services), relating this directly to their local and strategic accessibility, and particularly in relation to the provision of public transport;
- They define the Designated Districts within their areas and the geographical extent of the core centres and of the catchments of Designated Towns and Designated Districts;
- Local transport plans, as an integral component element of Local Area Plans or Development Plans, are prepared for each of the Designated Towns and Designated Districts in consultation with the Authority. These plans will address the implementation of the relevant measures contained in the Strategy and will be integrated into the relevant Development Plan or Local Area Plan;
- There is cooperation between Local Authorities along boundary areas including the preparation of joint plans where appropriate; and
- The strategic transport function of national roads, including motorways, will be maintained by limiting the extent of development that would give rise of the generation of local car traffic on the national road network.

(Greater Dublin Area Draft Transport Strategy - 2030 Vision, Measure LU3).

Planning Policy Framework

The planning of residential areas is governed by a suite of legislation and planning policy guidance that has been expanded, clarified and refined over time. The objective for residential development is the delivery of high quality places to live. The range of relevant national policies can be distilled into a series of high-level

aims for successful and sustainable residential development in urban areas, as follows:

- Prioritise walking, cycling and public transport, and minimise the need to use cars;
- Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience;
- Provide a good range of community and support facilities, where and when they are needed and that are easily accessible;
- Present an attractive, well-maintained appearance, with a distinct sense of place and a quality public realm that is easily maintained;
- Are easy to access for all and to find one's way around;
- Promote the efficient use of land and of energy, and minimise greenhouse gas emissions;
- Provide a mix of land uses to minimise transport demand;
- Promote social integration and provide accommodation for a diverse range of household types and age groups;
- Enhance and protect the green infrastructure and biodiversity; and
- Enhance and protect the built and natural heritage.

(Sustainable Residential Development in Urban Areas, p5).

These principles are common to all forms of residential development. Of most importance and relevance to this study is planning policy and practice as it relates to :

- residential density; and
- integration with high-quality public transport.

The development of these policies is set out below.

National and Regional Policy

Residential Density, Guidelines for Planning Authorities was issued in 1999 by the Department of Environment, Heritage and Local Government. It was the first statutory guidance to encourage higher densities generally, and gave policy advice in relation to development at particular locations as follows:

- Town and City centres;
- Brownfield Sites;
- Inner Suburban / Infill;
- Outer Suburban / Greenfield;
- Institutional Lands; and
- Town / Village.

Dwellings per hectare is the most appropriate measure for estimating the gross or net yield of existing or future housing, but should be used in conjunction with other planning standards and with plot ratio in particular when controlling development form.

(Residential Density Guidelines, paragraph 2.3.3)

The quantitative advice given in relation to various classes of site are set out in Table A.1 below.

Location	Density Guidance
Town Centre	<i>In order to maximise inner town and city population growth, there should, in principle, be no upper limit on the number of dwellings that may be provided within any town or city centre site, subject to the following safeguards</i>
Brownfield	<i>Where [Brownfield Redevelopment] sites exist and, in particular, are proximate to existing or future public transport corridors, the opportunity for their re-development to higher densities, subject to the safeguards expressed, should be promoted.</i>
Infill	<i>Subject to reasonable conformity with these, developments on infill sites, particularly those in excess of 0.5 hectares (1.2 acres), should be capable of proposing their own density and character.</i>
Outer Suburban / Greenfield (Away from public transport)	<i>Studies have indicated that whilst the land take of the ancillary facilities remains relatively constant, the greatest efficiency in land usage on such lands will be achieved by providing net residential densities in the general range of 35-50 dwellings per hectare (14 - 20 per acre) and such densities should be encouraged generally.</i>
Outer Suburban / Greenfield (proximate to public transport)	<i>On lands proximate to existing or proposed public transport corridors, densities in excess of 50 dwellings per hectare (20 dwellings per acre) should be permitted, subject to appropriate qualitative safeguards.</i>

Table A.1: Residential Density Guidance 1999

National policy has evolved since 1999, broadening and strengthening support for higher density in appropriate locations.

The Strategic Planning Guidelines for the Greater Dublin Area were published in 1999 and set out a strategy for the long-term future locations to accommodate anticipated growth in the Greater Dublin Area. The strategy identified the need to consider the Metropolitan Area of Dublin separately to the Hinterland Area and proposed development to be concentrated at key nodes along transport corridors. The guidelines were given a statutory status as Regional Planning Guidelines in the Planning and Development Act 2000. The guidelines have been updated as Regional Planning Guidelines for the Greater Dublin Area, the current version dating from 2010. Statutory plans for the counties of the Greater Dublin Area are required to be consistent with the Regional Planning Guidelines.

The Planning and Development Act 2000 gave statutory recognition to the concept of sustainable development. The First Schedule illustrates a variety of practical methods of implementing sustainability, such as promoting sustainable settlement and transportation strategies.

The Planning and Development Act 2000 also set the legislative framework for the creation of Strategic Development Zones. This mechanism has been used to set the policy framework for a number of major new residential areas within the Greater Dublin Area. The development framework and phasing of delivery has seen close collaboration between planning authorities, state agencies, government departments and communities. The intention has been to co-ordinate the delivery of infrastructure (including transport infrastructure) with the delivery of residential units.

The National Spatial Strategy 2002-2020 (2002) established a detailed sustainable development framework for strategic spatial planning, particularly with regard to the location of new housing in urban areas, including the objectives of:

- *Maximising access to and encouraging use of public transport, cycling and walking; and*
- *Developing sustainable urban and rural settlement patterns and communities to reduce distance from employment, services and leisure facilities and to make better use of existing and future investments in public services, including public transport.*

(NSS, p13).

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It set out an framework for deciding on the most appropriate locations, and placed emphasis on principles such as:

- Concentration of development in locations where it is possible to integrate employment, community services, retailing and public transport; and
- Mixed-use and well-designed higher density development, particularly near town centres and public transport nodes like railway stations.

(NSS, p103).

The National Climate Change Strategy 2007-2012 includes energy efficiency measures aimed at reducing greenhouse gas emissions from residential development. At a strategic level, sustainable residential development involves settlement patterns that can help minimise transport-related energy consumption and encourage energy-efficient housing layouts.

Sustainable Residential Development in Urban Areas, Guidelines for Planning Authorities, was issued by the Department of the Environment, Heritage and Local Government in May 2009. It forms the principal policy document guiding the design and layout of residential schemes in Ireland. The guidelines supercede the 1999 Residential Density Guidelines.

The guidelines emphasise a phased and sequential approach to the zoning and development of land for development, the availability of public transport and the setting of appropriate density levels

- Extending outwards from the centre of an urban area, as recommended in the development plan guidelines (DoEHLG, 2007);
- Adequate existing public transport capacity available or likely to be available within a reasonable development timescale; and
- The setting of appropriate density levels within the area (see Chapter 5).

(pages 7,8).

Chapter 5 of the Guidelines relate to development in cities and set out principles to be applied for residential density and where increased density may be appropriate.

Location	Density Guidance
Town Centre	There should, in principle, be no upper limit on the number of dwellings that may be provided within any town or city centre site
Brownfield	Where such significant sites exist and, in particular, are close to existing or future public transport corridors, the opportunity for their re-development to higher densities, should be promoted
Public Transport Corridors	In general, minimum net densities of 50 dwellings per hectare should be applied within public transport corridors, with the highest densities being located at rail stations / bus stops, and decreasing with distance away from such nodes. Minimum densities should be specified in Local Area Plans.
Infill	The local area plan should set out the planning authority's views with regard to the range of densities acceptable within the area
Institutional Lands	Average net densities at least in the range of 35-50 dwellings per hectare should prevail and the objective of retaining the open character of the lands achieved by concentrating increased densities in selected parts (say up to 70 dph)
Outer Suburban / Greenfield	Net residential densities in the general range of 35-50 dwellings per hectare

Gross and net densities

A gross density measure is best applied to estimating overall land areas required for mixed use developments or for Local Area Plans.

A net site density measure is a more refined estimate than a gross site density measure and includes only those areas which will be developed for housing and directly associated uses.

A net density is the most commonly used approach in allocating housing land within Local Area Plans and is appropriate for development on infill sites where the boundaries of the site are clearly defined and where only residential uses are proposed. It is also appropriate where phased development is taking place in a major development area (perhaps spanning different plan periods) and individual housing areas have been identified.

While there are quantitative targets set out in the guidelines, the emphasis in the document is in the quality of the environment created and the delivery of well-designed attractive homes.

The guidelines encourage the development of substantial areas of brownfield or greenfield sites that a local area plan is prepared to facilitate its sustainable development and to avoid it being developed in a piecemeal fashion.

The Dublin Transport Act 2008 provides for a far stronger co-ordination of planning and transportation in the Dublin region.

"Each planning authority within the GDA shall ensure that its development plan is consistent with the transport strategy of the DTA."

(Section 9(6)(a) of the Planning and Development Act as inserted by the Dublin Transport Authority Act 2008).

In addition, the views of the NTA must be considered in the making of statutory plans at county and regional level.

B: Consultations

Over a 3 month period, a number of meetings took place with interested parties and stakeholders. This included consultation with:

- NAMA;
- South Dublin County Council;
- Dublin City Council;
- Dun Laoghaire Rathdown County Council;
- Fingal County Council;
- Dublin Docklands Development Authority;
- National Roads Authority;
- Dublin Regional Authority; and
- Construction Industry Federation.

Principal points discussed are outlined below:

- Current delivery of housing in Dublin;
- Cost of delivery of residential development, including development contributions;
- Market options for development;
- Constraints to development;
- Profile of principal housing areas in each of the local authority areas;
- Critical attributes of quality housing areas;
- Extant planning permissions;
- Status of local authority plans (eg. local area plans);
- Future population requirements; and
- Issue of density and optimisation of valuable land banks.

Similarly market consultations were undertaken with:

- Savills;
- Sherry Fitzgerald;
- HT Meagher O Reilly; and
- CBRE.

These discussions centred on:

- Market demand by housing type and location;
- Market for residential rental and purchase;
- Family housing requirements in the current market;
- Investor market;
- Cost of delivery of residential development and constraints to that delivery; and
- Role of housing agencies in delivering residential development.

C: Additional Case Studies

Overview of additional residential development areas assessed in Ireland, UK and Europe

Various aspects of the following residential development areas were assessed during this study in relation to topics and themes considered in the study, eg: housing typology, housing density, public realm, open space, parking strategy, phasing of development, delivery framework, delivery mechanism, land use mix (residential/ commercial).

They are listed here for reference purposes only.

Ireland

Honeypark (Dun Laoghaire Golf Course lands), Dublin

Aikens Village, Stepside

Ballintyre Hall, Ballinteer, Dublin

UK

Newcastle Great Park, Newcastle

Green Street, Nottingham

Milton Keynes (MK2)

Poundbury, Dorset

Adastral, Barnet London

Page Road Housing, Hounslow London

Holly Street Housing, East London

Europe

Riem, Munich, Germany

Vauban, Freiburg, Germany

Bo01 Malmo, Sweden

Hammarby Sjostad, Stockholm, Sweden

Orestad, Copenhagen, Denmark

Aspern, Vienna, Austria

Almere, The Netherlands

Lelystad, The Netherlands



Bo01 Malmo, Sweden



Holly Street Housing, East London



Aikens Village, Stepside

D: Strategic Residential Development Areas - Plans

South Dublin County Council

Figures received from South Dublin are broken down into Strategic Residential Development Areas (Adamstown and Clonburris), Other Residentially Zoned Lands (A1 Zoned lands plus Tallaght), and Infill areas for the County.

Status	Number of Units per Area			
	Strategic Residential Development Areas (Clonburris + Adamstown)	Other Residential Development Lands Tallaght + A1 Zoned Lands	Infill Areas	Total
Existing Occupied Apartments	709	472	191	1,372
Existing Occupied Houses	367	432	96	895
Total Potential Deliverable Apartments	2,164	1,443	628	4,235
Total Potential Deliverable Houses	638	1,221	417	2,276
Total Potential Deliverable Units *	2,802	2,664	1,045	6,511
Density	35-90 units / ha			
Total (Existing + Under Construction + Permitted)	4,027	3,688	1,344	9,059

Table D.1: Strategic Residential Development Areas: South Dublin

*Deliverable =vacant / under construction / permitted

Table E.1 above highlights the current situation in relation to the delivery of residential units in the Strategic, Other and Infill residential development lands within South Dublin. Of these areas both Adamstown and Clonburris have the capacity to accommodate significant residential development, are designated Strategic Development Zones and are served by rail. There is also significant capacity available in the Other Residentially Zoned lands of South Dublin (Tallaght + A1 Zoned Lands) with the number of deliverable houses being larger than that of the key areas of Clonburris and Adamstown.

The Clonburris SDZ Planning Scheme (2008) states that the lands have a capacity of approximately 9,500 – 11,500 residential units. To date, only one planning permission, for 682 apartments and 151 houses, has been granted at Clonburris, and that permission falls within the Clonburris LAP area, rather than the SDZ. No residential development has been carried out to date.

Therefore, of the figures set out above for the Strategic Residential Development Areas, all of the existing occupied residential units (both houses and apartments) are located within Adamstown. According to its planning scheme, Adamstown SDZ area has provision for approximately 10,500 dwellings at a density range of between 35 and 90 dwellings per hectare. To date, 709 apartments and 367 houses have been completed and are occupied.

It should be noted that the majority of the existing residential development in Adamstown has been built in areas designated for low – medium density development, and the proposed high density development areas, at the southern and south western portions of the site adjacent to Adamstown Station, remain undeveloped.

One of the key principles for the delivery of the Adamstown SDZ is the provision of infrastructure in advance of, or in tandem with, development. This principle is well-founded in relation to achieving successful sustainable residential communities. However, the

current economic climate now presents a challenge to this principle, in that the private sector is severely constrained in funding such infrastructure upfront, and public sector funding is unavailable.

Housing development can now be achieved in Adamstown within current infrastructure provisions. However, once the requirement exists for further upfront delivery of infrastructure, the market may not be able to follow through with housing delivery. This may require an assessment of the Planning Scheme to examine its flexibility, or indeed a review of some of its key tenets, in order to progress the delivery of the SDZ in the short to medium term.



D

Dún Laoghaire Rathdown County Council

Type	Number of Units
Cumulative Area	c. 891 Ha
Existing Occupied Apartments	3,465
Existing Occupied Houses	3,914
Total Potential Deliverable Apartments	3,285 (1,793 outstanding permissions)
Total Potential Deliverable Houses	574 (546 outstanding permissions)
Total Potential Deliverable *	3,859
Density	Min 50 units / ha
Total Units (Existing + Under Construction + Permitted)	11,238

Table D.2: Strategic Residential Development Areas: Dún Laoghaire Rathdown

**Deliverable =vacant / under construction / permitted*

There are three sites designated as Strategic Residential Development Areas within Dún Laoghaire Rathdown, under this study. They are Cherrywood, Stepside and Sandyford. The three sites have different profiles but they all are served by LUAS and thus have been designated for areas of higher density residential development to accommodate significant populations.

Cherrywood is currently the least developed of the three. Designated as a SDZ, for which a Planning Scheme has been recently adopted by Council (2012), the site has a stated potential to accommodate 5,840 – 8,318 residential units over its 75ha area. Currently, there are 690 occupied apartments and 328 occupied houses on the site. In terms of outstanding planning permissions, there is currently permission to develop a further 117 apartments and 18 houses. The proposed density range is 35-125 dwellings per hectare.

Stepside has experienced a significant level of residential development over recent years. There are currently 1,487 occupied apartments and 3,586 occupied houses in the area. In terms of outstanding permissions there is currently permission to develop 1,397 further apartments and 528 houses.

Sandyford is a mixed use location which has a strong office based element. All of the existing and proposed residential development at Sandyford is for apartments with 1,288 existing occupied apartments and a further 1,190 under construction. Further to this, permission exists for 279 additional apartment units within the Sandyford area.



Fingal County Council

Type	Number of Units per Area		
	Fingal All Urban areas	Strategic Residential Development Areas (Hansfield, Stapolin/Baldoyle, Portmarnock South, Phoenix Park Racecourse)	Other Residential Development Lands
Existing Occupied Apartments	4,309	844	3,466
Existing Occupied Houses	3,796	385	3,423
Under Construction Apts	1,135	341	814
Under Construction Houses	793	99	702
Outstanding Permission Apts	8,440	3,459	5,326
Outstanding Permission Houses	5,509	1,399	4,756
Total Potential Deliverable Apartments	9,575	3,800	6,140
Total Potential Deliverable Houses	6,302	1,498	5,458
Total Potential Deliverable	15,877	5,298	11,598
Density		Av.37 units / ha	
Total (Existing + Under Construction + Permitted)	23,982	6,527	18,487

Table D.3: Strategic Residential Development Areas: Fingal

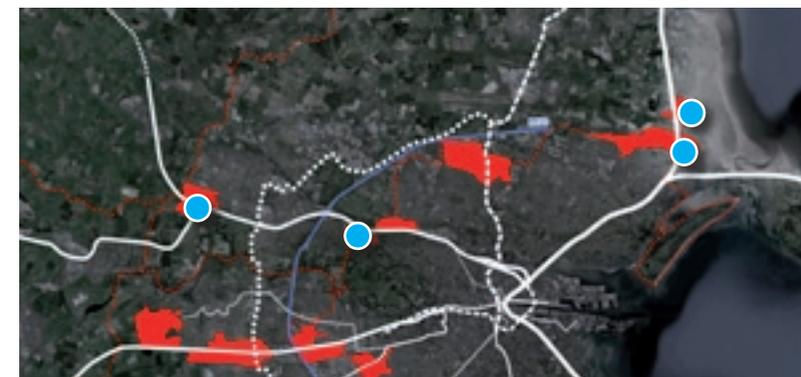
**Deliverable =vacant / under construction / permitted*

The Strategic Residential Development Areas in Fingal for this study include Hansfield, Phoenix Park Racecourse, and the parts of the North Fringe that fall within the Fingal administrative area (encompassing Portmarnock South, Baldoyle / Stapolin). Although these sites are all well located in terms of high quality public transportation links, a limited amount of development has occurred to date. Table E.3 above shows that these Strategic Residential Development Areas have the potential to cumulatively deliver over 5,000 dwelling units. The average density of existing and proposed residential development on these lands is lower than that of the South Dublin, Dun Laoghaire Rathdown and Dublin City Strategic Residential Development Areas. This is a reflection of the fact that residential delivery in Fingal has mainly comprised houses.

Hansfield is designated as an SDZ with 54.25ha of its overall area of 80.74ha ear-marked for residential development. Its stated residential capacity range is 2,850 to 3,150 dwellings but currently only 114 houses and 12 apartments have been completed and are occupied within the site. 63 houses and 36 apartments are currently classed as under construction while there is outstanding permission for 738 apartments and 334 houses. The stated appropriate density range for residential development within Hansfield is between 18 and 84 dwellings per hectare, with an average 37 units per hectare. This is broken down into low density (18 units per hectare), with 36 and 48 units per hectare in the Ongar Road East and Ongar Road West sector and areas with higher density apartment typologies of 74-84 units per hectare proposed in the vicinity of the canal and railway station.

The lands at Portmarnock South are served by the Portmarnock train station which is located immediately north of the site. Its stated residential capacity is for 948 apartments and 355 houses. As it is located within an Airport Public Safety Zone the density of development permissible on these lands is 40 units per hectare. To date, there has been no development on the lands but there is outstanding planning permission for 316 apartments and 632 houses.

Baldoyle/Stapolin is served by rail at the Clongriffin train station which is located on the western perimeter of the site. The 2001 Baldoyle Action Area Plan provided for approximately 2,600 homes on the Plan lands. Approximately 540 units are completed and occupied with 94 units completed and vacant and a further 205 units under construction. Planning permission exists for 1,289 residential units which have not yet started. The majority of the permissions which have not started are apartment developments. At this time, only one sector of the original plan lands does not have planning permission. Preparation of the Baldoyle –Stapolin LAP 2012-2018 is currently underway.



D

Dublin City Council

For the most part the lands selected as Strategic Residential Development Areas within Dublin City are located in the outer areas of the county in close proximity to the administrative boundary. Lands within the core city area, such as the Docklands, Heuston Station etc have not been included at this stage of the study, as due to their location, their development will naturally be of a higher density and of a wider use mix than covered by this study. As a result this study has included 6 areas within Dublin City as Strategic Residential Development Areas. They are:

[Clongriffin/Belmayne, Ballymun, Pelletstown, Park West / Cherry Orchard, Naas Road Lands](#)

Full details in relation to the level of development and outstanding permission on these lands have not yet been made available but figures from the Dublin City Development Plan 2011 highlights the residential capacity of the Key Developing Areas within the City:

Key Developing Areas Strategy	2016 Housing Units
Inner City	6300
Clongriffin/Belmayne	4000
Ballymun	3900
Pelletstown	1800
Docklands	1950
Naas Road	2100
Heuston	1200
Rest of City	6300

Table D.4: Housing Capacity of Key Developing Areas, Dublin City Development Plan 2011-2017



The table below highlights the available information on residential units developed in addition to occupancy for Pelletstown, Clongriffin/Belmayne, Parkwest / Cherry Orchard and Ballymun. It also includes information on Heuston South Quarter and Clancy Barracks as they are also designated as key developing areas within the Dublin City Council Development Plan 2011-2017.

DCC Designated Key Developing Areas	
Pelletstown (Overall)	
Units Completed	1,977
Unit Types Completed	1,712 apartments, 265 houses
Occupancy	219 unoccupied (only two locations where blocks were entirely vacant)
Clongriffin/Belmayne (North Fringe)	
Units Completed	3,219
Unit Types Completed	C 2,243 apartments, 976 houses
Occupancy	474 unoccupied
No of apartments not commenced	3,127
No of houses not commenced	1,520
Parkwest /Cherry Orchard	
Units Completed	842
Unit Types Completed	829 apartments, 13 houses.
Occupancy	C 100% occupancy.
Deliverable Apartments	981
Ballymun (Overall from Regeneration Developments)	
Units Completed	2,953
Unit Types Completed	Full breakdown not available.
Occupancy	C 100 % occupancy (51 units unoccupied only)
Units Scheduled for Completion 2012	261
Heuston South Quarter	
Units Completed	343
Unit Types Completed	343 apartments
Occupancy	303 occupied and 40 unoccupied.
Clancy Barracks	
Units Completed	405
Unit Types Completed	405 apartments
Occupancy	200 occupied/ 205 unoccupied.

Table D.5: DCC Designated Key Developing Areas

To date Ballymun and the Clongriffin/Belmayne have experienced the greatest level of development of the Strategic Residential Development Areas in Dublin City. Both areas have almost 3,000 residential units completed and occupied. The Clongriffin/Belmayne has a stated capacity of approx 4,000 further units. The Draft LAP for the Clongriffin/Belmayne has set a minimum overall net density for the site of 50 units per hectare for the delivery of these units.

The Naas Road site is strategically located adjacent to two LUAS stops and is within 1 kilometre of the Kildare rail line. As Table E.4 above demonstrates it has the capacity to accommodate over 2,000 residential units The 2009 Strategic Plan for the lands has suggested that apartment units should account for 60-70% of the total future residential accommodation for the area. To date no redevelopment of the site has taken place.

E: Data Sheets



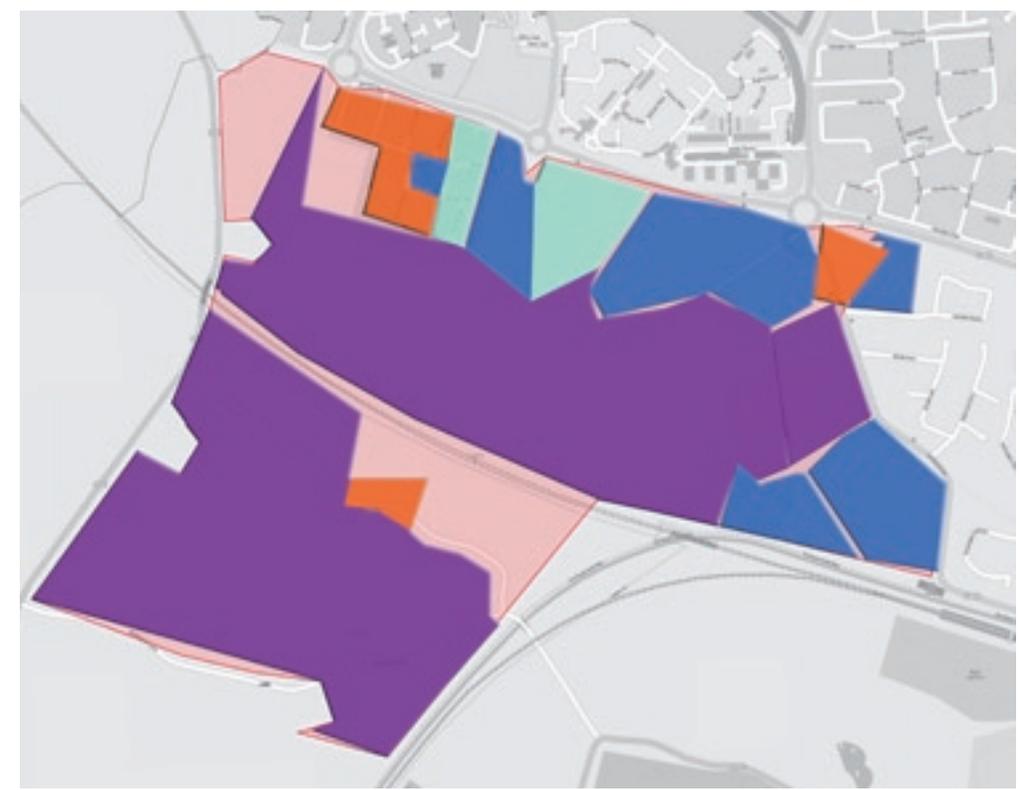
Site Location

FINGAL Hansfield / Barnhill

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



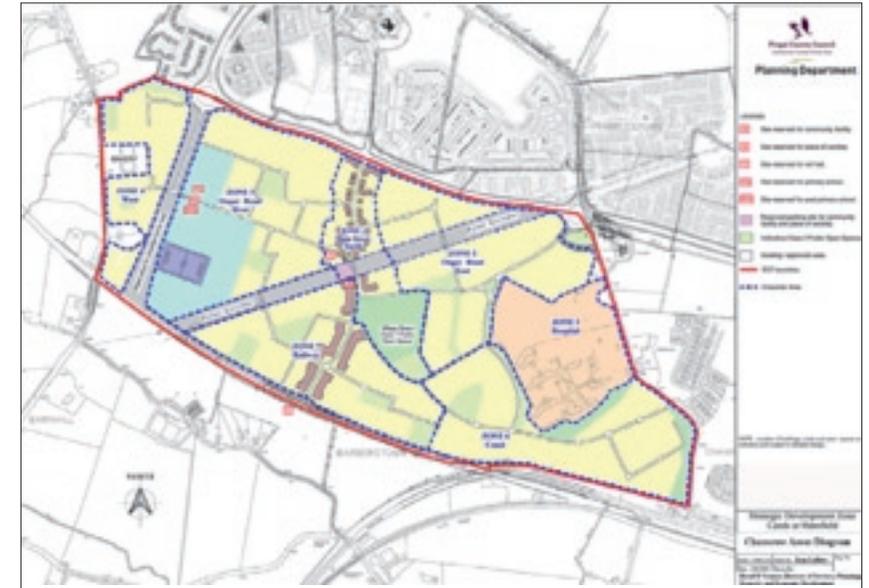
Current Status

E

HANSFIELD	
Statutory Plan	Fingal County Development Plan 2011-2017 / Hansfield SDZ Planning Scheme April 2006
Area	c. 80.74 Ha (54.25 Ha net available for residential development –does not include Barnhill)
Proposed timeframe for delivery	None given
Public transport provision	Located 400m from Clonsilla Rail Station
Stated residential capacity	3,000 dwellings + / - 150 dwellings 1 bedroom units 6–12% 2 bedroom units 46-52% 3 bedroom units 28-34% 4 bedroom units 7-13%
Stated appropriate density range:	18-84 dwellings / ha (av. 37 units / ha)
Existing Occupied Apartments	12
Existing Occupied Houses	111
Houses – Under Construction or Unoccupied	64
Apartments – Under Construction or Unoccupied	36
Outstanding Permission Apartment	738
Outstanding Permission Houses	334
Total Potential Deliverable	1,172

Development of the SDZ lands will be organised in three phases. Accordingly, the three primary elements of public transport infrastructure in the Hansfield area have been incorporated into the phasing set out below. These are the completion of the Ongar Road QBC, the completion of a number of enhancements to Clonsilla Station, and the provision of a rail halt on the Dunboyne Spur to facilitate the development of the SDZ lands.

In addition to the above, a number of social infrastructural and community facilities, including schools and open spaces, are to be delivered as part of each phase. Occupation of dwellings constructed in a latter phase may not occur until all of the required facilities and infrastructure in the previous phase have been completed. The phasing of development is related to unit numbers rather than being time specific. Similarly, the phasing of development is not location specific, and may occur within any of the Planning Scheme zones, subject to the necessary specific infrastructure and physical connections being provided.



Hansfield SDZ Planning Scheme – Zoning Framework



Site Location

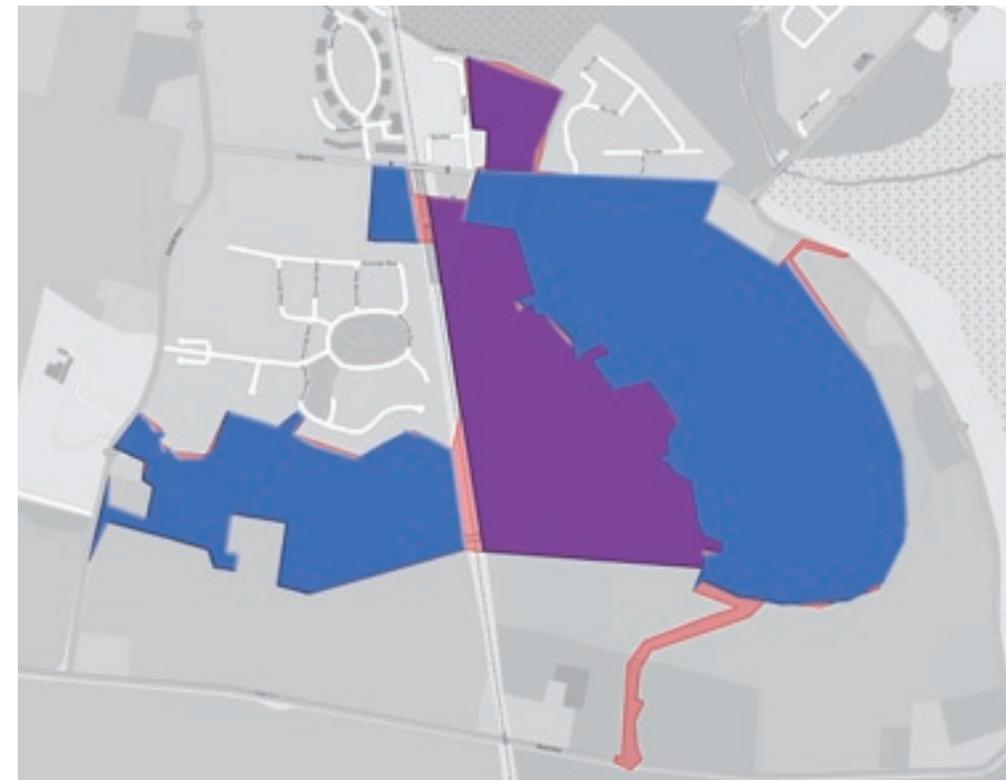
FINGAL

Portmarnock South

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

PORTMARNOCK SOUTH	
Statutory Plan	Fingal County Development Plan 2011-2017
Area	c. 58 Ha
Public transport provision	Portmarnock Train Station immediately to the north of the site
Stated population capacity	4,200 persons
Stated residential capacity	948 Apartments / 355 Houses
Stated appropriate density range:	Within Airport Public Safety Zone which restricts density to approx 40 units / hectare
Existing Occupied Apartments	1
Existing Occupied Houses	12
Houses – Under Construction or Unoccupied	8
Apartments – Under Construction or Unoccupied	20
Outstanding Permission Apartment	345
Outstanding Permission Houses	646
Total Potential Deliverable	1,019



Portmarnock South Local Area Plan



Site Location

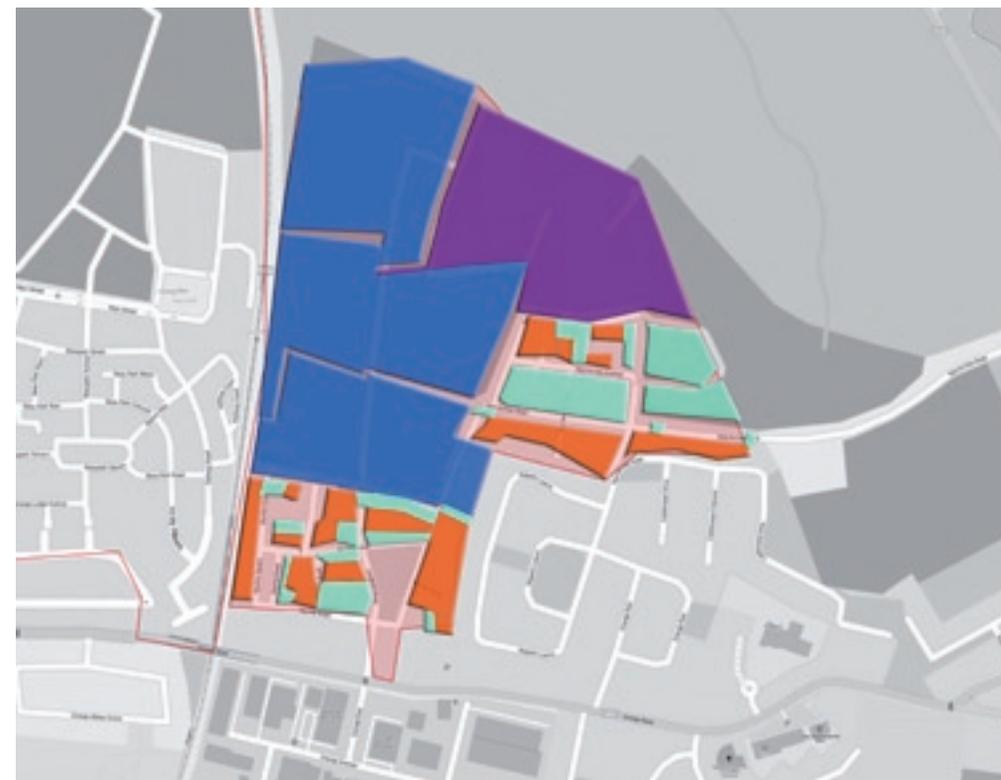
FINGAL

Baldoyle / Stapolin

- Key Development Areas
- Built Residential
 - Under Construction
 - Outstanding Permission
 - Potential Infill
 - Built Other
 - Site Area



Site ON GOOGLE EARTH MAP



Current Status

E

BALDOYLE / STAPOLIN	
Statutory Plan	Fingal Development Plan 2011-2017
Area	c. 39 Ha
Public transport provision	Clongriffin Train Station
Stated residential capacity	2,600
Existing Occupied Apartments	361
Existing Occupied Houses	218
Houses – Under Construction or Unoccupied	27
Apartments – Under Construction or Unoccupied	285
Outstanding Permission Apartment	1,365
Outstanding Permission Houses	144
Total Potential Deliverable	1,821



Proposed draft Baldoyle-Stapolin LAP 2012-2018



Site Location

FINGAL

Phoenix Park Racecourse

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

PHOENIX PARK RACECOURSE	
Statutory Plan	Fingal Development Plan 2011-2017 / The Former Phoenix Park Racecourse and Adjacent Lands Action Area Plan, April 2001
Area	c. 48Ha
Public transport provision	Dart Line
Stated residential capacity	c2300 dwellings
Stated appropriate density range:	50 units per hectare (gross) 82 dwellings per hectare (net)
Existing Occupied Apartments	470
Existing Occupied Houses	44
Houses – Under Construction or Unoccupied	0
Apartments – Under Construction or Unoccupied	0
Outstanding Permission Apartment	1,011
Outstanding Permission Houses	275
Total Potential Deliverable	1,286



Former Phoenix Park Racecourse Action Area Plan, 2000



Site Location

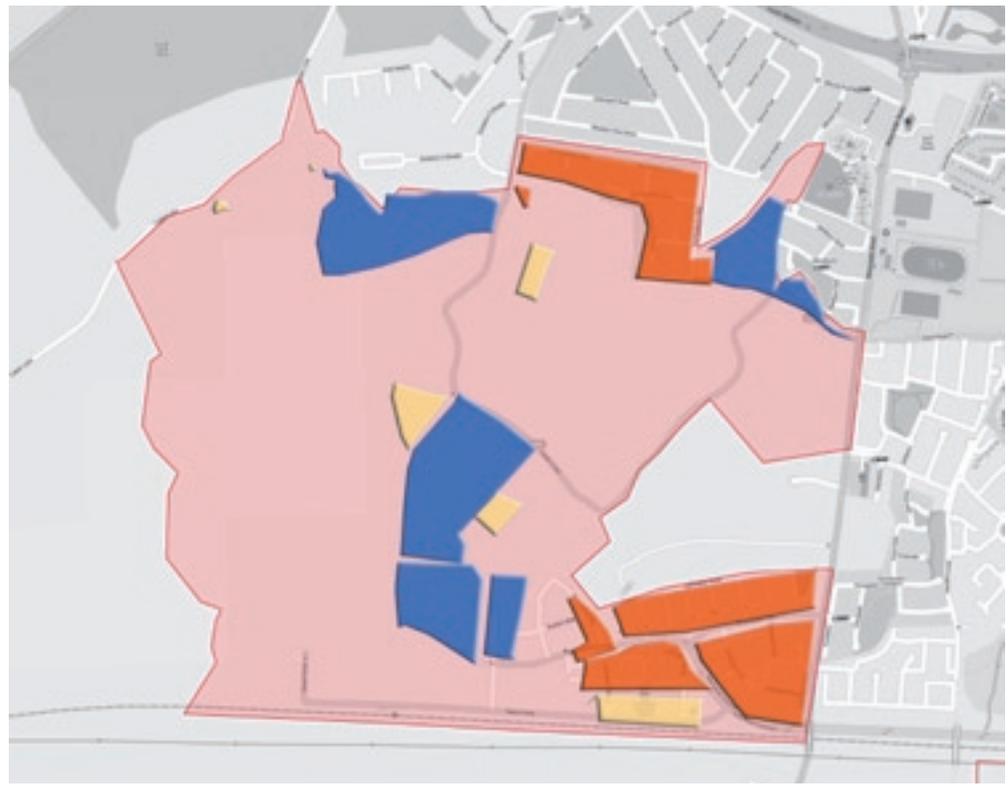
SOUTH DUBLIN

Adamstown

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

ADAMSTOWN	
Statutory Plan	South Dublin Development Plan 2010-2016 / Adamstown SDZ Planning Scheme
SDZ Area	223.5 Ha
Proposed timeframe for delivery	Not given
Public transport provision	Adamstown Train Station
Stated residential capacity	8,250- c10,500 residential units
Stated appropriate density range:	35-90 dwellings per hectare
Existing Occupied Apartments	709
Existing Occupied Houses	367
Outstanding Permission Apartment	1,482
Outstanding Permission Houses	487
Total Potential Deliverable	1,969

The proposed phasing schedule for Adamstown is based on the premise that the number of dwelling units that may be permitted in each phase of development is dependent on a predetermined amount of works to provide infrastructure, services, facilities and amenities having been completed to serve each phase.



Development Density

SOUTH DUBLIN

Clonburris

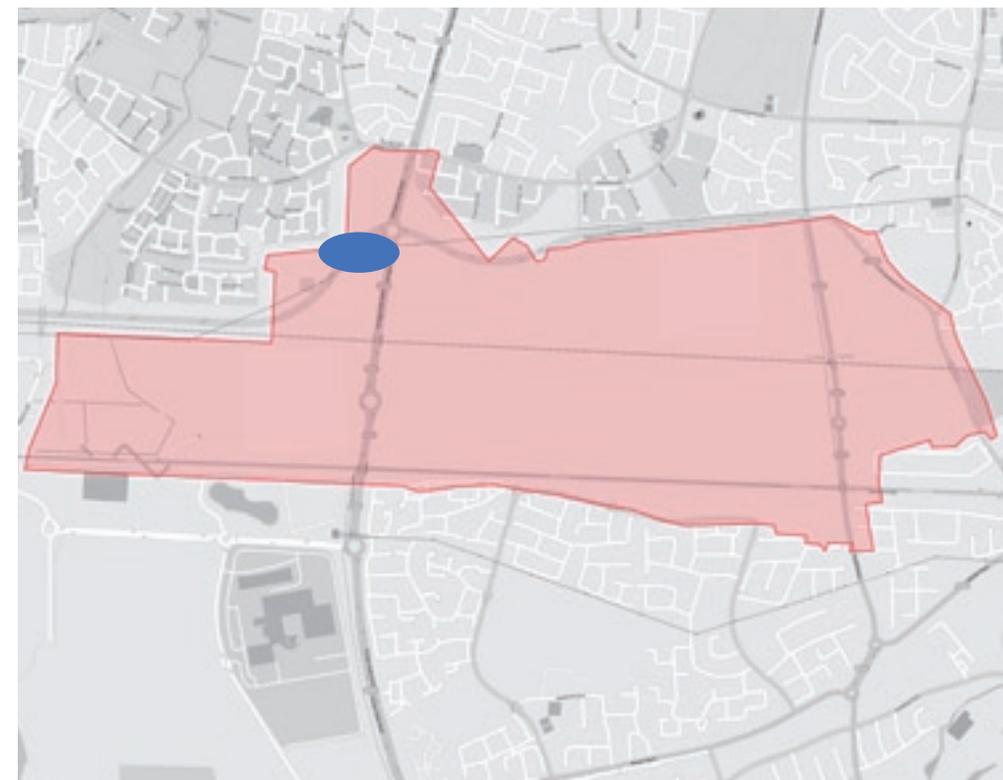


Site Location

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

CLONBURRIS	
Statutory Plan	South Dublin Development Plan 2010-2016 / Clonburris SDZ Planning Scheme
Area	108.26 Ha (net developable area)
Public transport provision	Fonthill and Kishoge Train Station
Stated residential capacity	9,585-11,505 residential units
Stated appropriate density range:	86.3 to 106.3 dwellings per hectare
Existing Occupied Apartments	0
Existing Occupied Houses	0
Houses – Under Construction or Unoccupied	0
Apartments – Under Construction or Unoccupied	0
Outstanding Permission Apartment	682
Outstanding Permission Houses	151
Total Potential Deliverable	833

Infrastructure works, services, amenities and facilities that are required to service each phase of residential development in both parts of the Plan area are clearly set out. Any works specified in a particular phase may be brought forward and completed earlier than scheduled. In phases 1-2 in both the LAP and SDZ areas, residential and other development must take place within the areas of the site identified.

All the specified infrastructure works, services, amenities and facilities must be completed and available for use no later than completion of the number of units specified for that phase. In the event that not all the specified infrastructure works, services, amenities and facilities are completed for a specific phase, further units cannot be completed and occupied. A 'Roll-Over' mechanism may operate between any two phases in either the SDZ Planning Scheme area or LAP area respectively, with the prior written consent of the Development Agency/Planning Authority. In the event of the maximum number of units being completed before the required facilities and infrastructure are in place in any one phase, a Roll-Over' of up to 250 dwellings units may be constructed in the following phase, subject to planning permission. These residential units may not be occupied until the required facilities and infrastructure in the previous phase have been completed.



Landuse Strategy

DUN LAOGHAIRE - RATHDOWN

Sandyford



Site Location

- Key Development Areas
- Built Residential ■
 - Under Construction ■
 - Outstanding Permission ■
 - Potential Infill ■
 - Built Other ■
 - Site Area ■



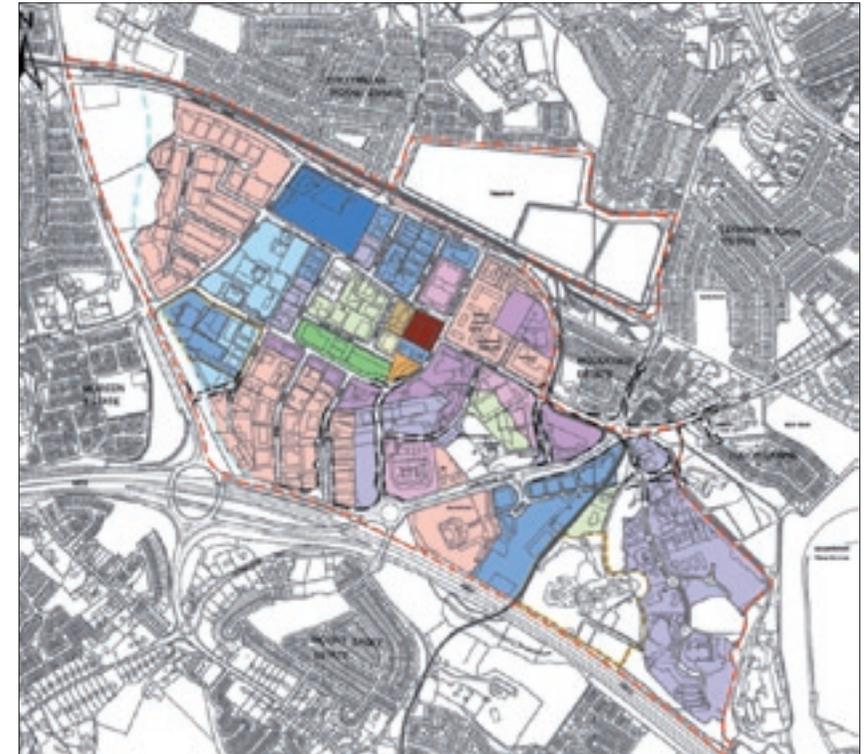
Site ON GOOGLE EARTH MAP



Current Status

E

SANDYFORD	
Statutory Plan	Dún Laoghaire Rathdown Development Plan 2010-2016 / Sandyford Urban Framework Plan 2011-2016
Area	c. 158 Ha
Public transport provision	Sandyford LUAS station
Stated residential capacity	1000 residential units in addition to those already granted (as of Sept 2011)
Stated appropriate density range:	55 – 175 units per hectare
Existing Occupied Apartments	1288
Existing Occupied Houses	0
Houses – Under Construction or Unoccupied	0
Apartments – Under Construction or Unoccupied	1190
Outstanding Permission Apartment	279
Outstanding Permission Houses	0
Total Potential Deliverable	1,469



Urban Framework Plan

DUN LAOGHAIRE - RATHDOWN

Stepaside

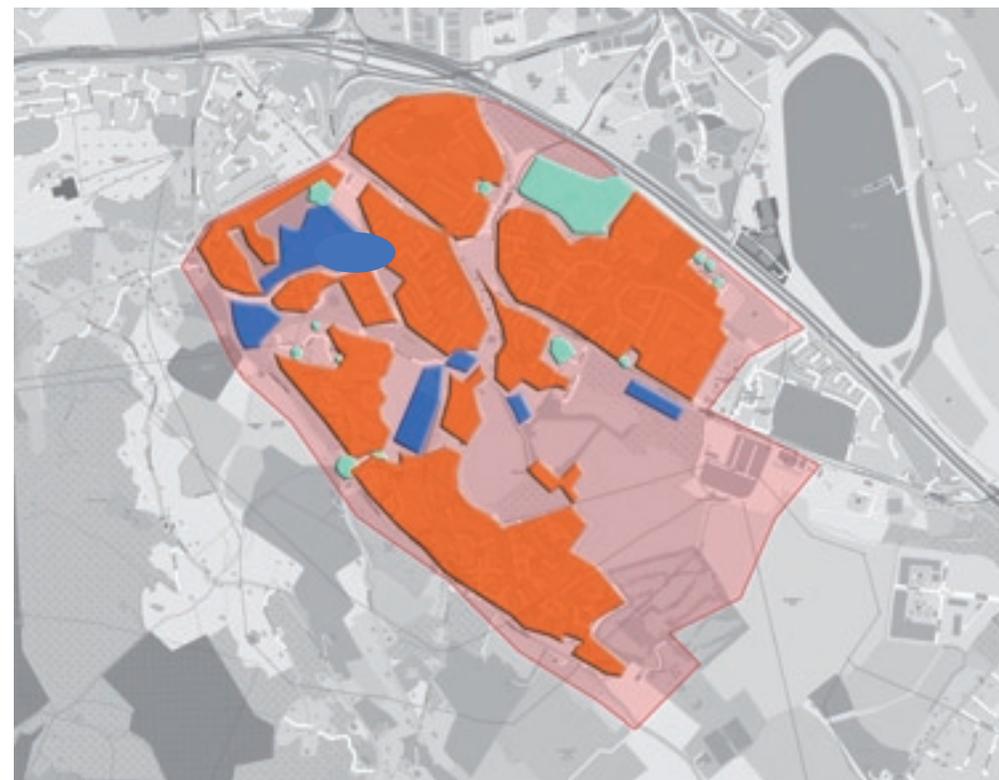


Site Location

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

STEPASIDE	
Statutory Plan	Dún Laoghaire Rathdown Development Plan 2010-2016 / Stepside Action Plan 2000
Area	c. 373 Ha
Public transport provision	LUAS
Stated appropriate density range:	Min 50 units/ per hectare
Existing Occupied Apartments	1,487
Existing Occupied Houses	3,586
Houses – Under Construction or Unoccupied	28
Apartments – Under Construction or Unoccupied	286
Outstanding Permission Apartment	1,397
Outstanding Permission Houses	528
Total Potential Deliverable	2,239



Stepside Action Plan, 2000



Site Location

DUN LAOGHAIRE - RATHDOWN

Cherrywood

- Key Development Areas
- Built Residential ■
 - Under Construction ■
 - Outstanding Permission ■
 - Potential Infill ■
 - Built Other ■
 - Site Area ■



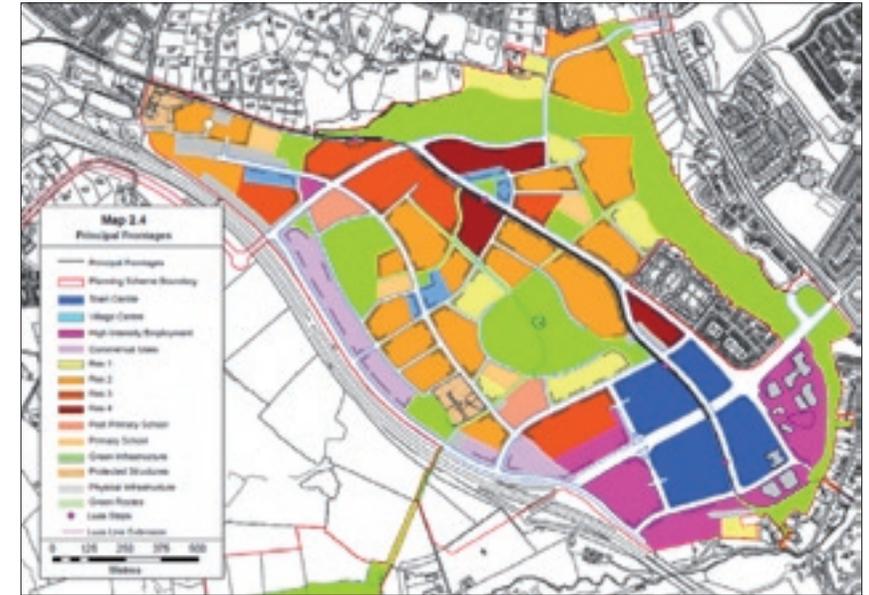
Site ON GOOGLE EARTH MAP



Current Status

E

CHERRYWOOD	
Statutory Plan	Dún Laoghaire Rathdown Development Plan 2010-2016 / Cherrywood SDZ Planning Scheme
Area	c. 360 Ha of which 75 Ha are designated for residential development
Public transport provision	LUAS
Stated residential capacity	5,840 - 8,318 max residential units
Stated appropriate density range:	35-125 dwellings per hectare
Existing Occupied Apartments	690
Existing Occupied Houses	328
Houses – Under Construction or Unoccupied	0
Apartments – Under Construction or Unoccupied	16
Outstanding Permission Apartment	117
Outstanding Permission Houses	18
Total Potential Deliverable	151



Cherrywood Plan



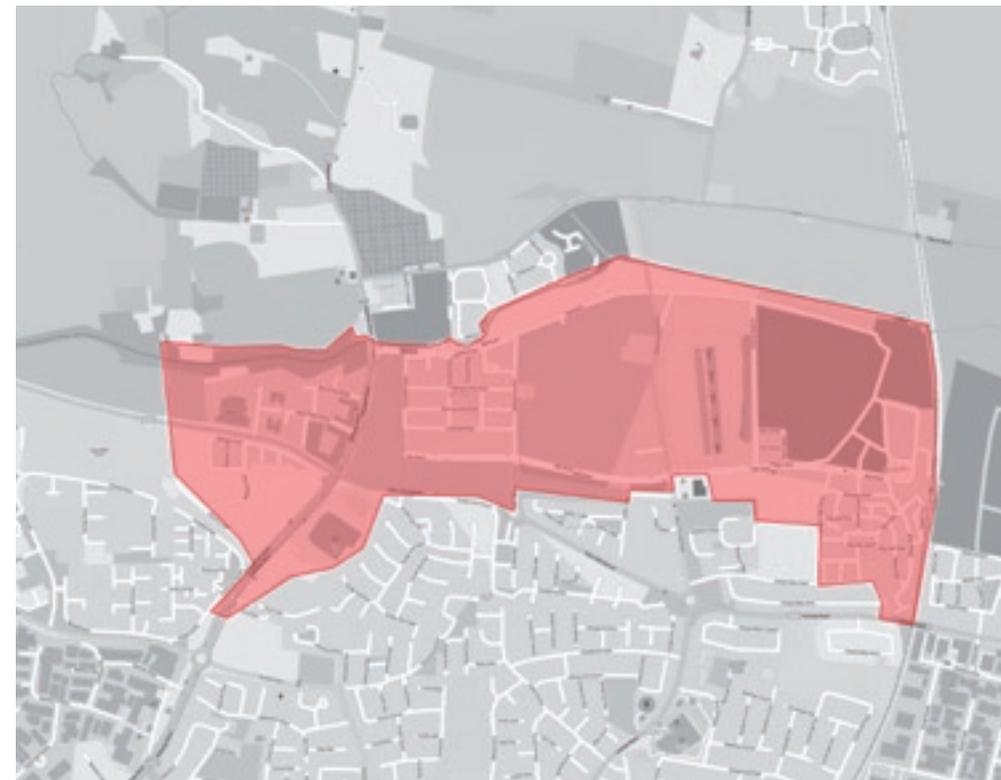
Site Location

DUBLIN CITY

Clongriffin - Belmayne



Site ON GOOGLE EARTH MAP



Current Status

E

CLONGRIFFIN-BELMAYNE	
Statutory Plan	North Fringe Action Area Plan 2000 / Draft Clongriffin - Belmayne Local Area Plan 2012
Area	c. 170 Ha (residential development)
Public transport provision	Clongriffin Train Station
Stated residential capacity	Approx 4,000 units
Stated appropriate density range:	Min overall net density of 50 units per hectare
Existing Occupied Apartments	2,243
Existing Occupied Houses	976
Under Construction or Unoccupied	474
Outstanding Permission	Approx 4,647
Total Potential Deliverable	Approx. 4,647

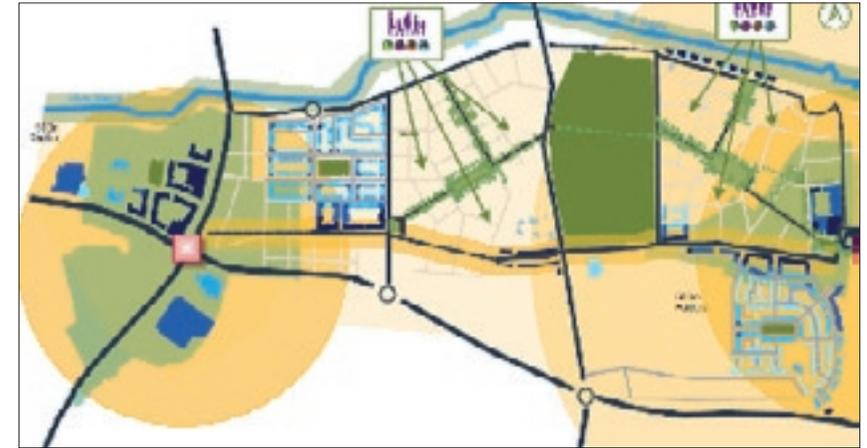
Draft Local Area Plan 2012

In areas outside the immediate 500 metre catchment of existing and future proposed public transport but still within a 1km catchment of a rail station, sustainable higher densities for high quality lifetime housing with associated community uses will be sought (in general an average net density of 50 units per ha for a scheme).

In areas outside the immediate 500 metre catchment of existing and future proposed public transport but still within a 1km catchment of a rail station, sustainable higher densities for high quality lifetime housing with associated community uses will be sought (in general an average net density of 50 units per ha for a scheme).

SDRA1 North Fringe (From Dublin City Development Plan 2011-2017)

1. To create a highly sustainable, mixed-use urban district, based around high quality public transport nodes, with a strong sense of place.
2. To achieve a sufficient density of development to sustain efficient public transport networks and a viable mix of uses and community facilities.
3. To establish a coherent urban structure, based on urban design principles, as a focus for a new community and its integration with the established community.



Draft Clongriffin/Belmayne Local Area Plan 2012



Site Location

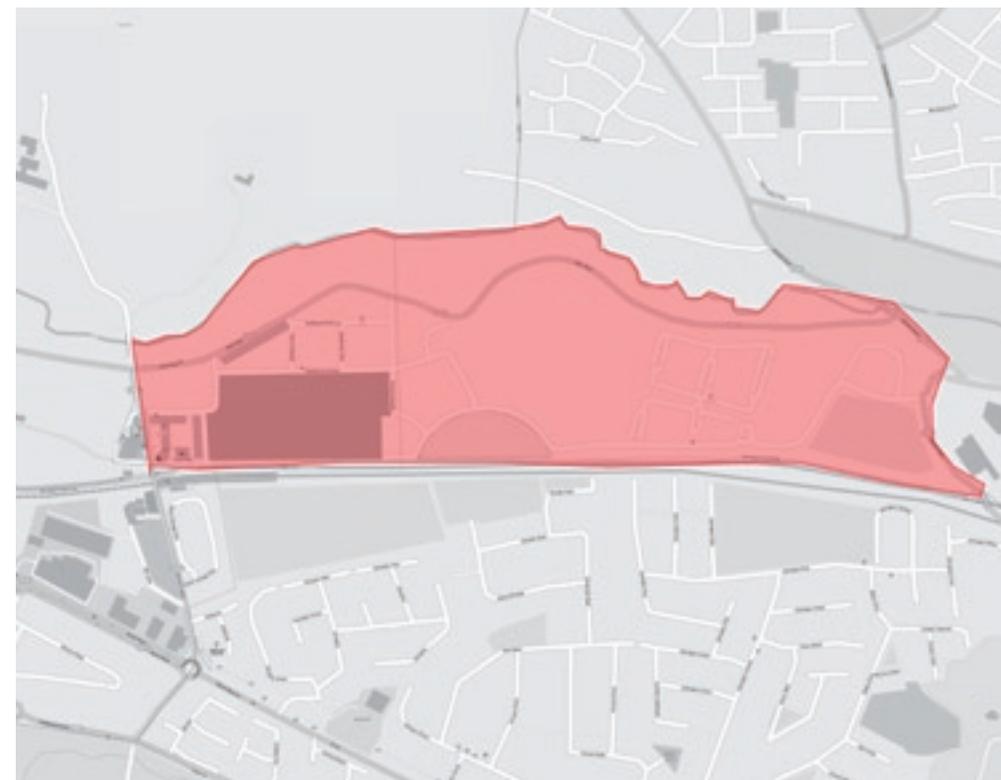
DUBLIN CITY

Pelletstown

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

PELLETSTOWN	
Statutory Plan	Dublin City Council Development Plan 2011 - 2017
Area	41 Ha (residential development)
Public transport provision	Ashtown Train Station
Stated residential capacity	Approx 1,800 units
Stated appropriate density range:	80-150 units per hectare
Existing Occupied Apartments	1,712
Existing Occupied Houses	265
Under Construction or Unoccupied	219 unoccupied
Outstanding Permission	929
Total Potential Deliverable	929

SDRA 3 Pelletstown (From Dublin City Development Plan 2011-2017)

1. To provide for a sustainable living environment, prioritising public transport and mixed use.
2. To achieve a density of development that can be met by the public transport, social, educational, recreational and community infrastructure available in the immediate area.
3. To ensure that buildings in the area are such that they do not facilitate social isolation, detachment or militate against opportunities for regular engagement with neighbours.
4. To ensure social and public amenities and spaces do not facilitate anti-social behaviour.
5. To ensure that development is provided in a context that does not overwhelm the surrounding areas and residents.
6. 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:
 - Two high quality village centres, one to the east and west respectively, as the focus for mixed use development and community activities;
 - A tree lined canal-side boulevard linking the two village centres and providing the potential for developing a range of different experiences, including recreation uses;
 - A central park to provide the setting for leisure uses and community activities; and
 - North/south linkages facilitating good access to public transport and to the amenity of the Tolka Valley.
7. To promote the creation of a high quality public domain by establishing a high standard of design in architecture and landscape architecture.



OMP Masterplan for Pelletstown



Site Location

DUBLIN CITY

Parkwest / Cherryorchard

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

E

PARKWEST / CHERRYORCHARD	
Statutory Plan	Dublin City Council Development Plan 2011 - 2017
Area	c. 144.5 Ha
Public transport provision	LUAS
Stated residential capacity	Unknown
Existing Occupied Apartments	829
Existing Occupied Houses	13
Outstanding Permission Apartments	981

SDRA 4 Park West / Cherry Orchard (From Dublin City Development Plan 2011-2017)

1. To create a vibrant and sustainable new urban area with work, living and recreational opportunities, based around high quality public transport nodes.
2. To create a place with distinctive urban character, based on urban design principles with strong physical and psychological linkages to the city.
3. To provide for sufficient densities of development, to sustain public transport and a viable mix of uses.
4. To provide for an integrated public transport system, with bus and commuter rail as the main components.
5. To provide for the integration of the new community with the established community.
6. To provide for a balanced mix of residential tenure.
7. To develop a coherent spatial framework, incorporating the following elements;
 - Two axial routes, defined by buildings, providing the main structuring components, linking the proposed new rail station with Ballyfermot Road to the north and Park West Road to the south;
 - A Main Street at the intersection of the two axial routes, providing a safe and vibrant mixed use environment;
 - Two major new linked civic spaces adjacent to the rail station, creating a high profile for public transport and a strong sense of place for the local resident and working population; and
 - A series of nodal spaces at key junctions to act as place markers.
8. That in the creation of the 'new town' in the Park West/Cherry Orchard area as a policy and priority that the key historic and existing deficits with regard to lay-out, community underdevelopment, policing, anti-social activity, lack of provision for childcare etc. be factored in to be provided for in the new proposed development and that a new Charter for Cherry Orchard be articulated and become an integral part of the overall plans and initiatives for the area.



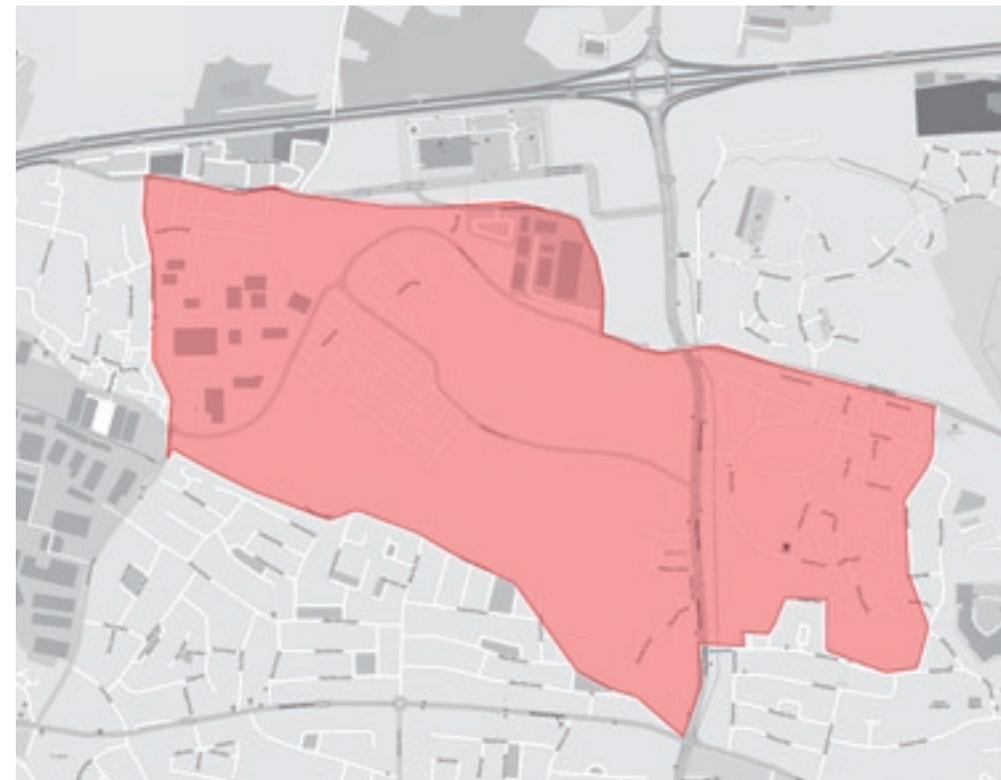
Site Location

DUBLIN CITY

Ballymun



Site ON GOOGLE EARTH MAP



Current Status

E

BALLYMUN	
Statutory Plan	Dublin City Council Development Plan 2011
Area	c. 279.6 Ha
Public transport provision	Bus
Stated residential capacity	3,900 units
Existing Residential Units	2,953
Units - Under Construction or Unoccupied (breakdown of typology not known yet)	51 units unoccupied 261 units to be completed

SDRA 2 Ballymun (From Dublin City Development Plan 2011-2017)

1. Maximise the economic potential of Ballymun and its surrounding areas in accordance with its strategic location, the proposed Metro North and its designation as a Key District Centre (KDC).
2. Enhance existing, and establish new and appropriate land-uses that support a growing mixed-use community, and seek innovative planning responses for the key sites in the area, that respond to the environmental, social, cultural and economic issues and demands facing the area.
3. Create internal and external links throughout the area – removing barriers to movement and establishing a strong and interactive relationship with Dublin city and the wider environment.
4. Create a network of well connected, sustainable mixed neighbourhoods, providing a range of facilities and a choice of tenure and house types, promoting social inclusion and integration.
5. Promote and enhance Ballymun and the wider area's reputation as a sustainable urban environment.
6. Promote Ballymun as a leading arts and cultural hub serving the city and wider region.



Site Location

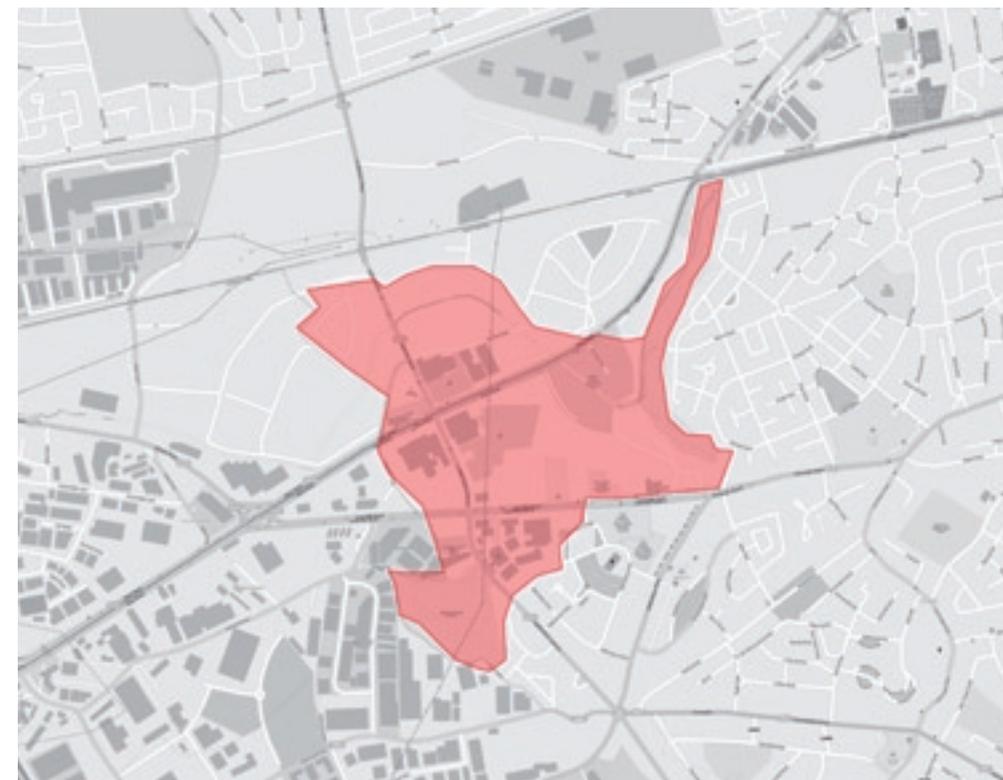
DUBLIN CITY

Naas Road Lands

- Key Development Areas
- Built Residential █
 - Under Construction █
 - Outstanding Permission █
 - Potential Infill █
 - Built Other █
 - Site Area █



Site ON GOOGLE EARTH MAP



Current Status

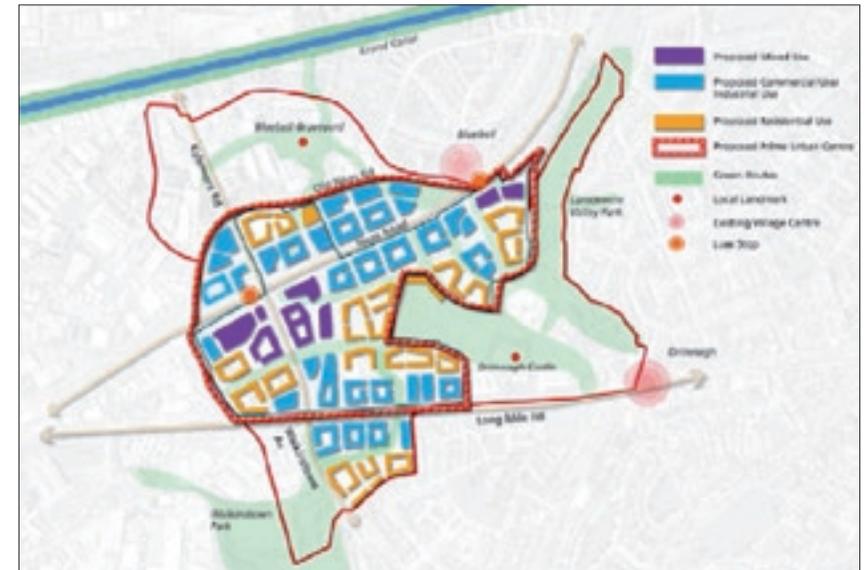
E

NAAS ROAD LANDS	
Statutory Plan	DCC Development Plan 2011 / Naas Roads Lands Strategic Plan 2009
Area	C. 60 Ha
Public transport provision	Bluebell & Naas Road Luas Stops, Kildare railway line within 1km to north of site
Stated residential capacity	2,100 units
Stated population capacity	4,700 – 6,056
Stated appropriate density range:	None given
Delivery / Permissions to date	0

SDRA 5 Naas Road (From Dublin City Development Plan 2011-2017)

Future development in the Naas Road industrial area shall be guided by the strategic policy objectives of the development plan in tandem with the vision and strategic aims of the Naas Road Lands Strategic Plan which seek to:

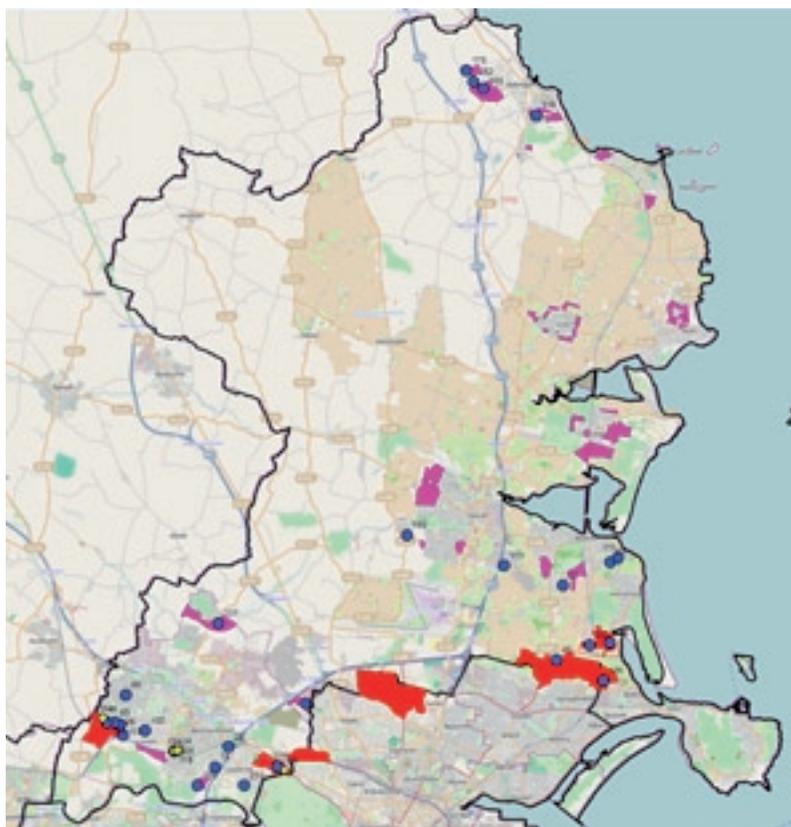
1. Link the plan area with the surrounding environment, to assist in enhancing a living community in and around the area.
2. Create connectivity throughout the plan area – removing barriers to movement and opening up attractive links between key areas.
3. Use existing and proposed infrastructure to establish a strong and interactive relationship with Dublin city and the wider environment.
4. Establish new and appropriate landuses that assist in creating relationships between one another, and support a growing mixed use community.
5. Seek innovative design responses for key sites (collectively and individually) that respond to the environmental, social, cultural and economic issues and demands facing the plan area.
6. Provide publicly accessible open spaces and green infrastructure which contribute to the amenities of the area and the green network.



Land Use Strategy for Naas Roads Lands Strategic Plan

F: Own Door Housing

Fingal currently has by far the greatest potential with 1,809 units either under construction / unoccupied or permitted but not developed. This corresponds with the overall breakdown of the residential development within the county. The map below highlights the location of sites with permission for in excess of 20 houses throughout Fingal. The majority of these sites are located outside of Strategic Residential Development Areas.



Map F.1: Fingal 20+ Houses

- Existing Occupied
- Outstanding Permissions
- Priority Areas
- Non Priority Areas

With regard to own door housing there are 6 sites within Dublin City that currently contain planning permission for residential development in excess of 20 houses. The map below highlights the locations of these sites and as can be seen North Fringe contains permission for by far the greatest number of houses.



Map F.2: DCC Current Permissions for House Developments

2008 - 2012, house only sites		
Planning Permissions	No. Sites	No. Units
1 - 3 house sites	183	252
4 - 19 house sites	20	159
20+ house sites	6	1,686
Totals	209	2,097

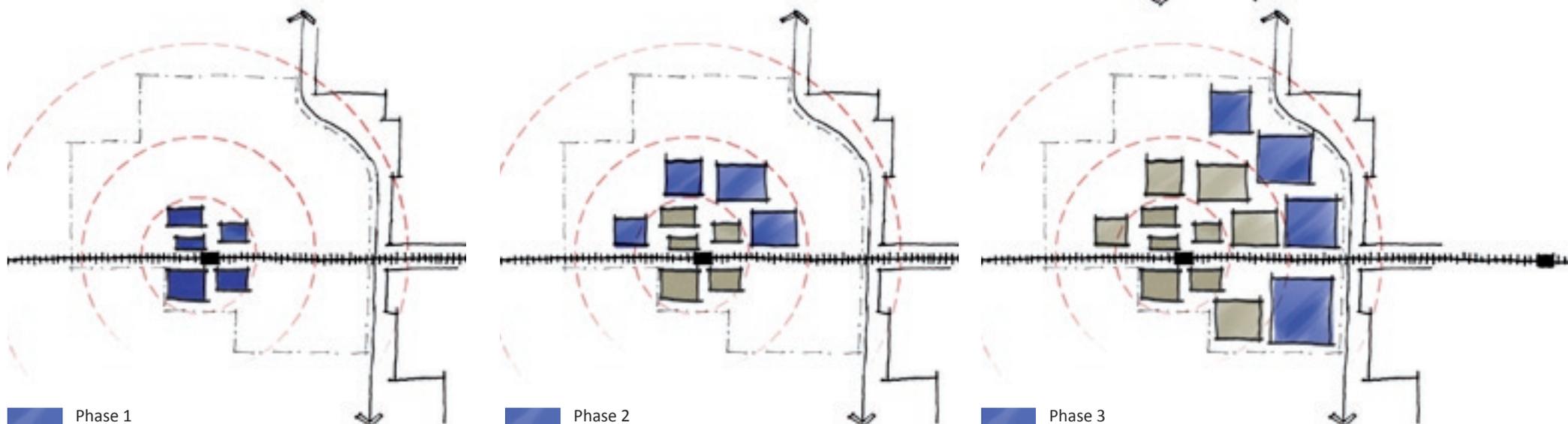
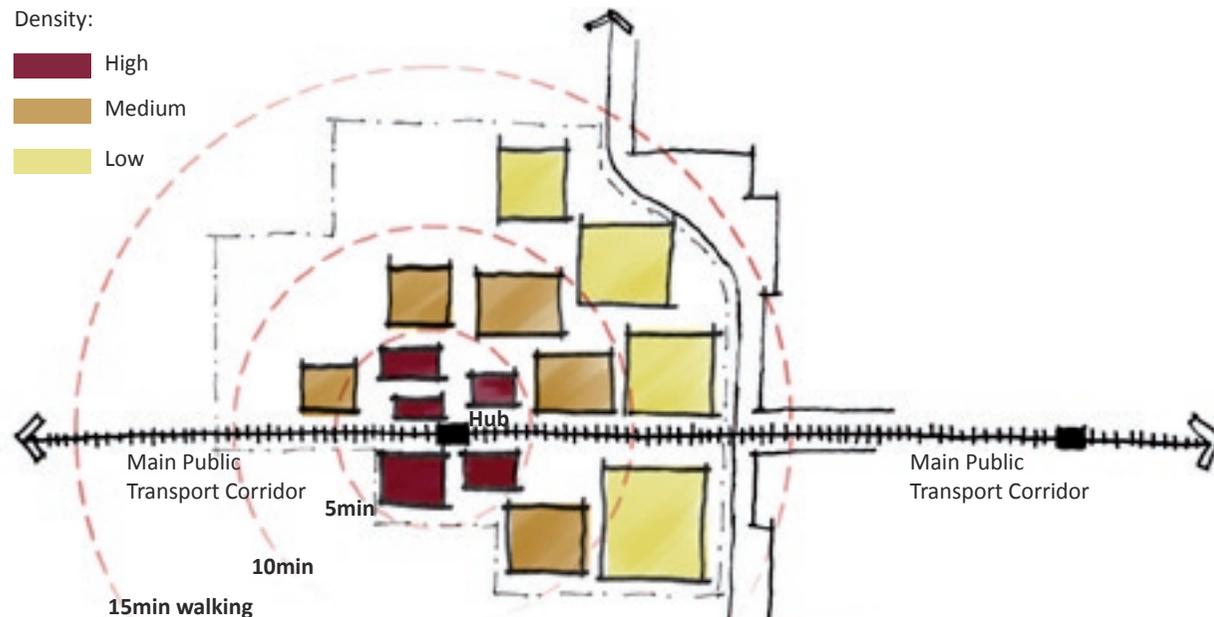
Table F.1: DCC Sites with Permission for 20+ Houses

G: Development Models

Development models explored here seek to identify how overall development can be delivered in a phased manner without compromising the settlement plan. A number of external factors are considered in relation to their impact on potential phasing and prioritisation of development delivery. Six models are assessed in density and phasing delivery terms.

G.1 RADIAL MODEL “CURRENT”

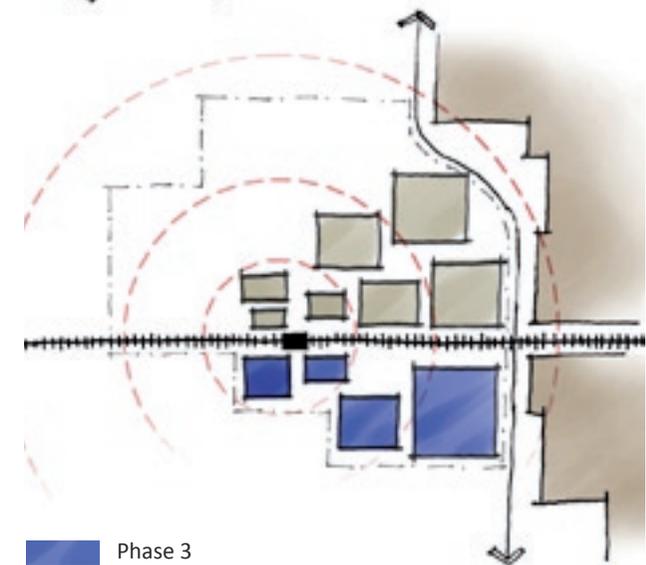
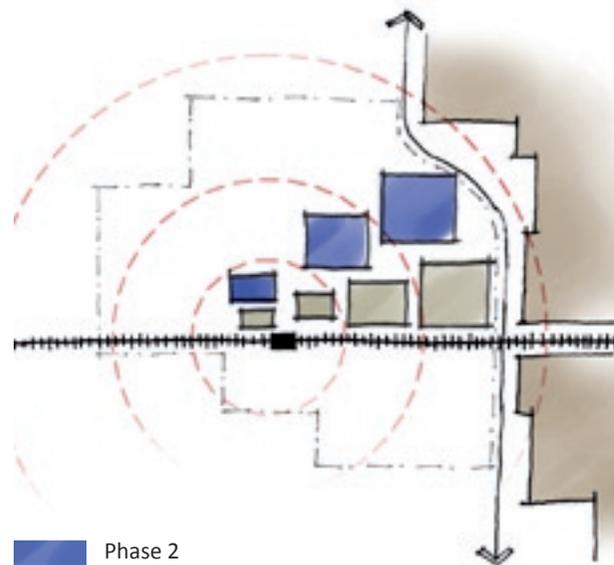
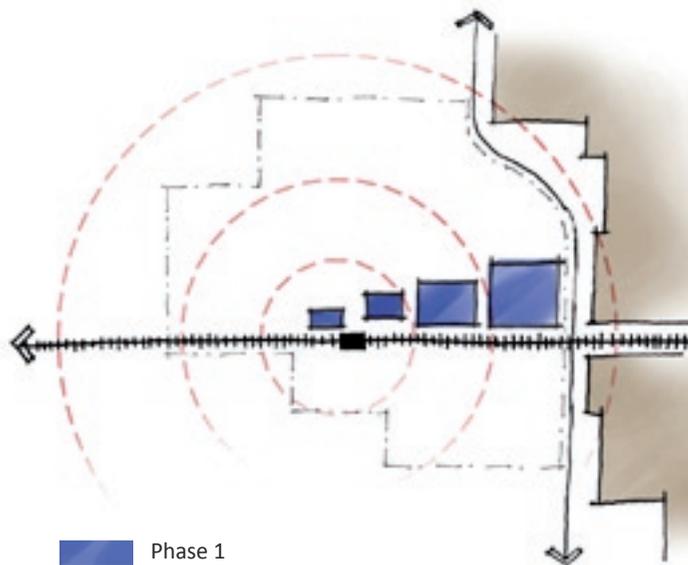
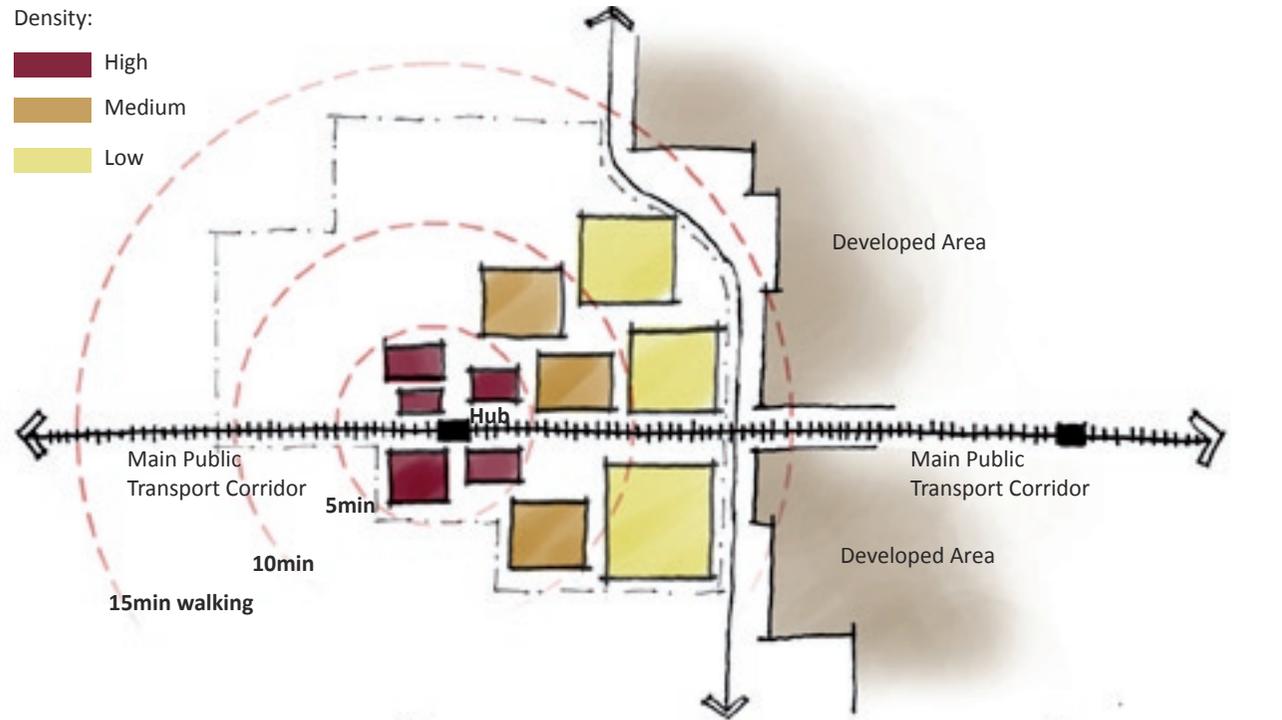
- Focused high density at rail hub;
- Early establishment of town centre mixed use at rail hub;
- Incremental drop in density with distance from hub; and
- Phased delivery with infrastructure.



G

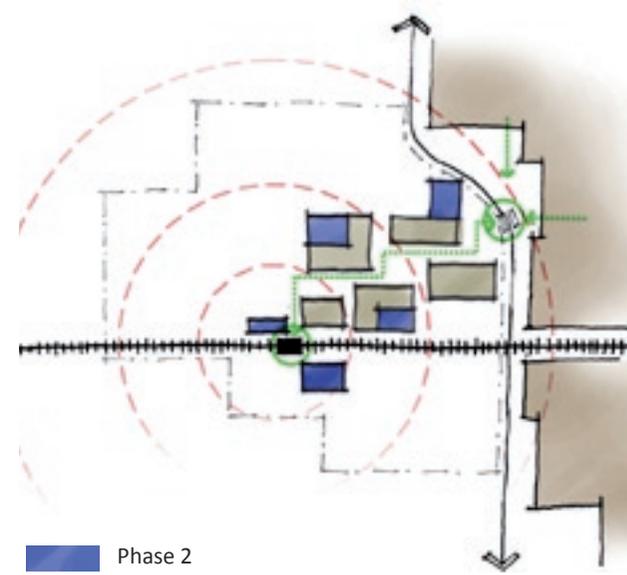
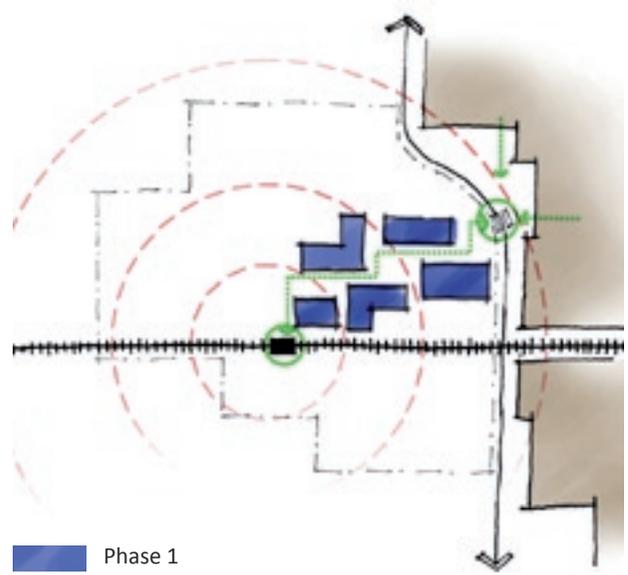
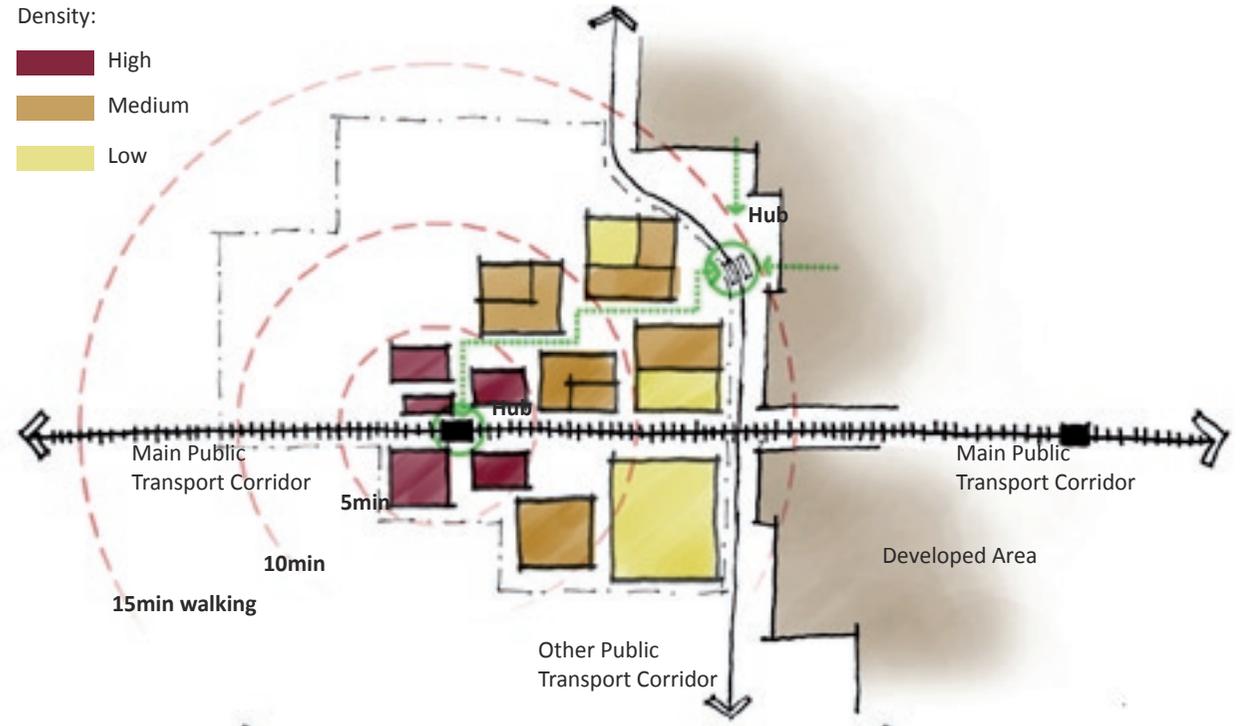
G.2 LINEAR MODEL

- Mix of densities through each phase;
- Limited infrastructure required for early phases; and
- Managed delivery of public open space required.



G.3 CONNECTING HUBS MODEL

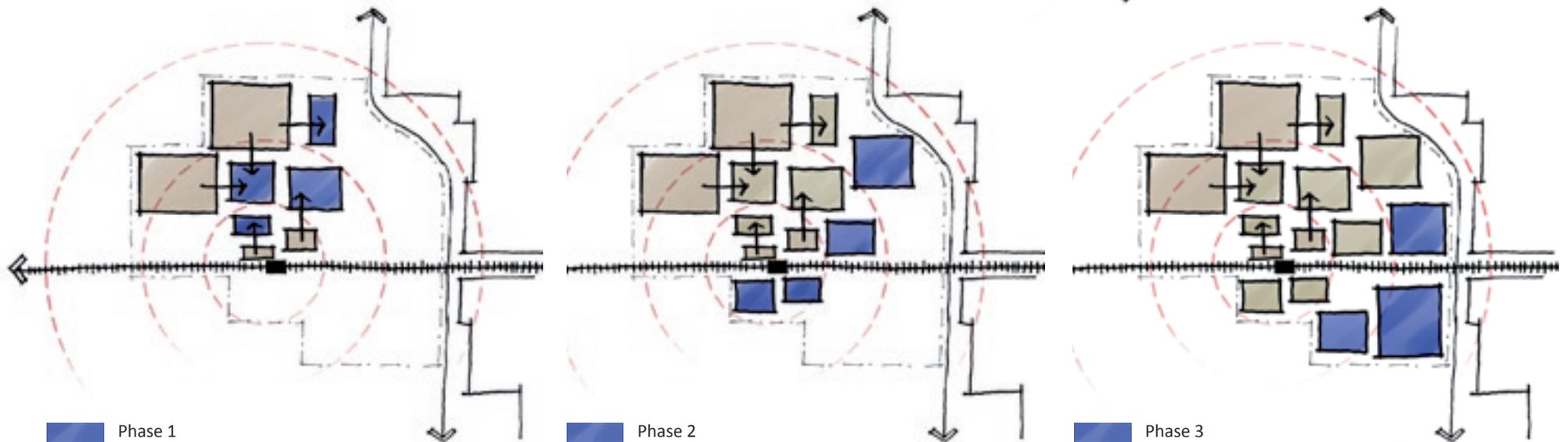
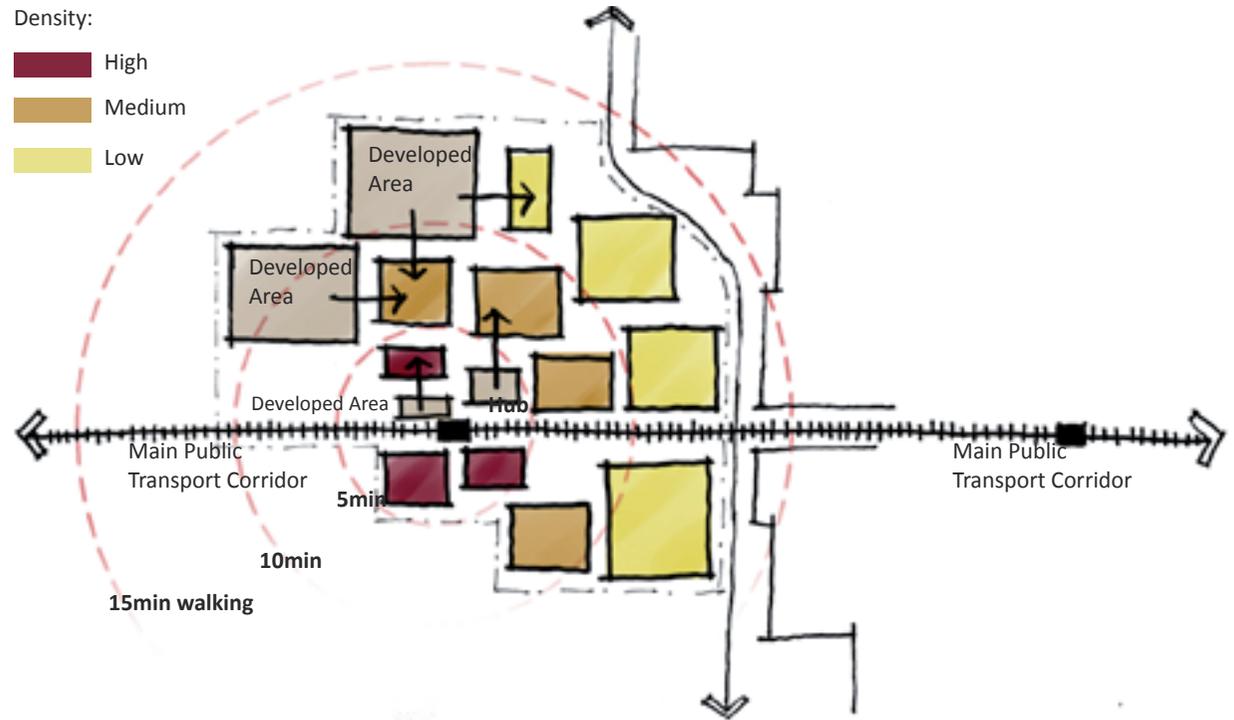
- Focus on connecting transport hubs;
- Mix of densities through each phase;
- Limited infrastructure required for early phases; and
- Good 'place building'.



G

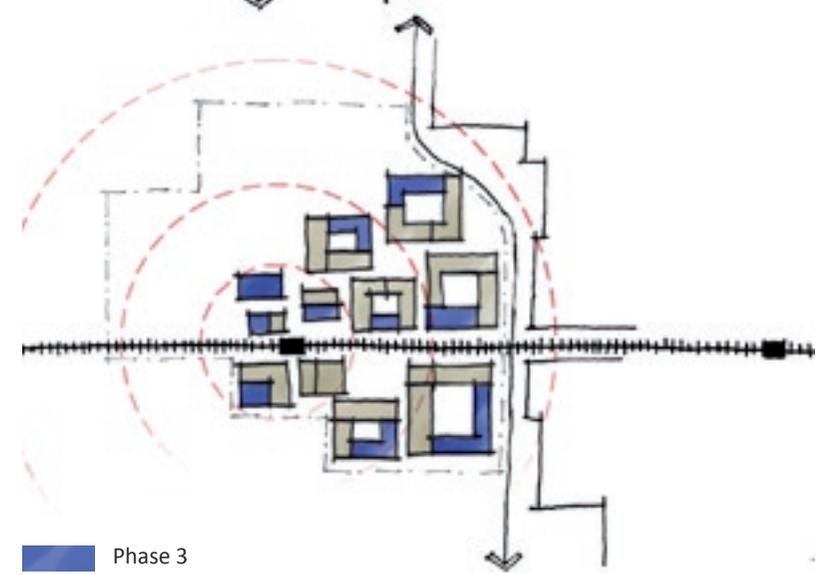
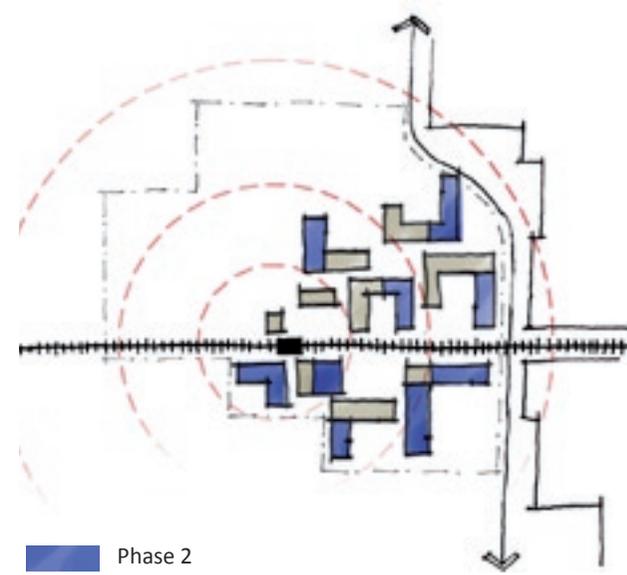
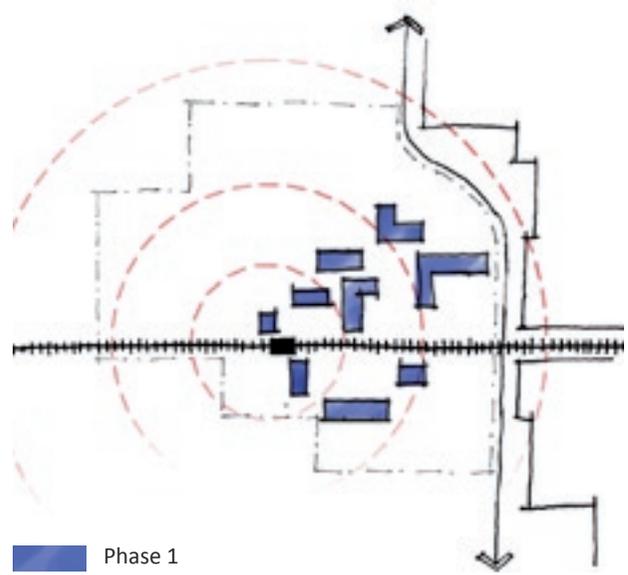
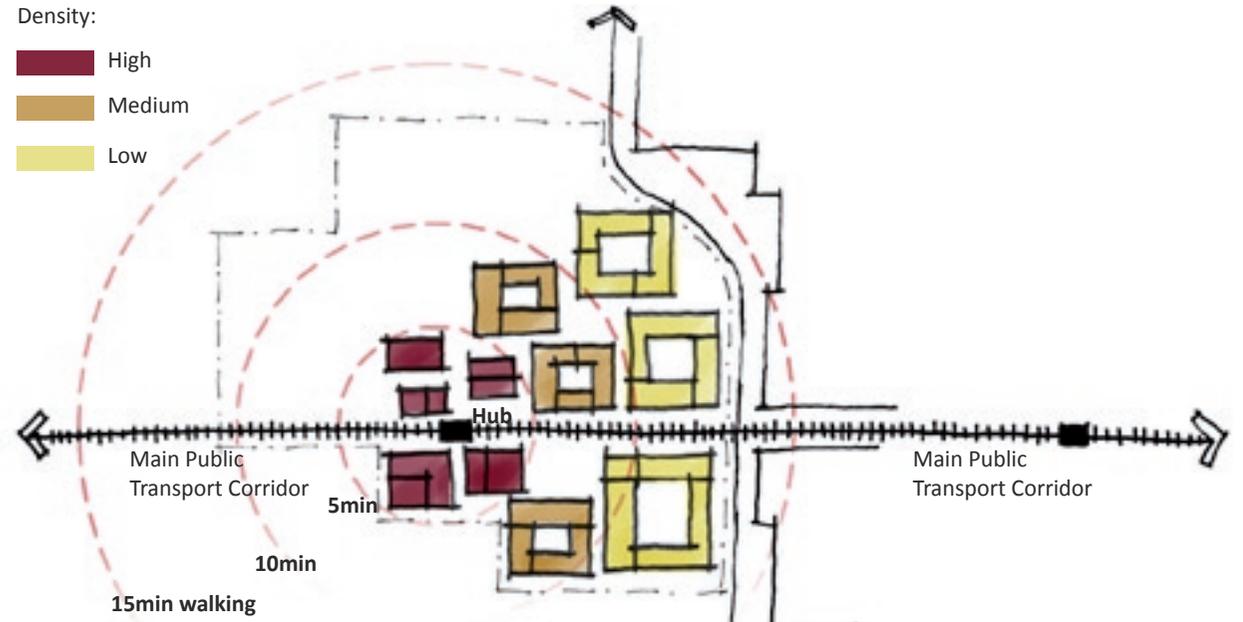
G.4 CONSOLIDATION MODEL

- Focus on connecting fragmented development;
- Limited additional infrastructure required for early phases; and
- Consolidating the built environment to create a sense of place.



G.5 'MIX' MODEL

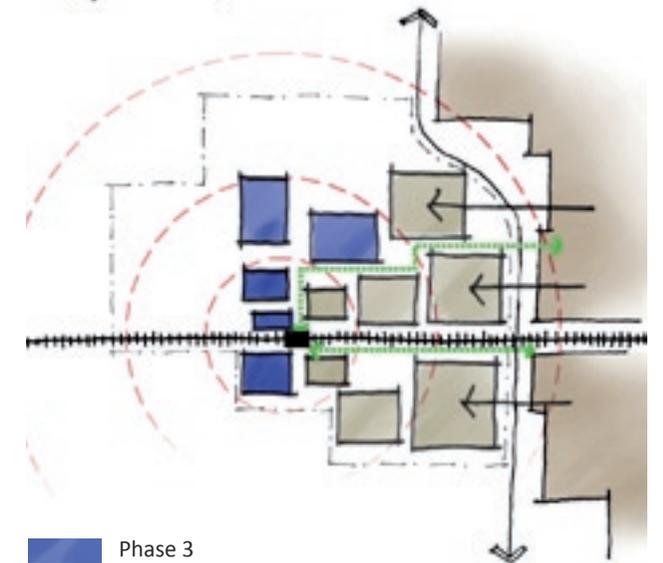
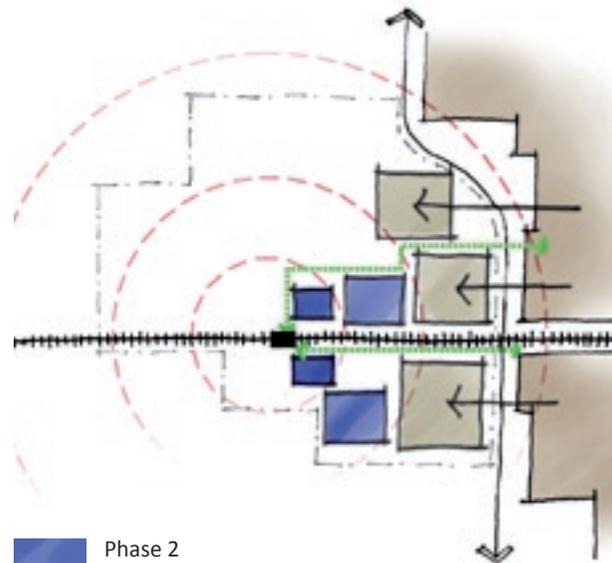
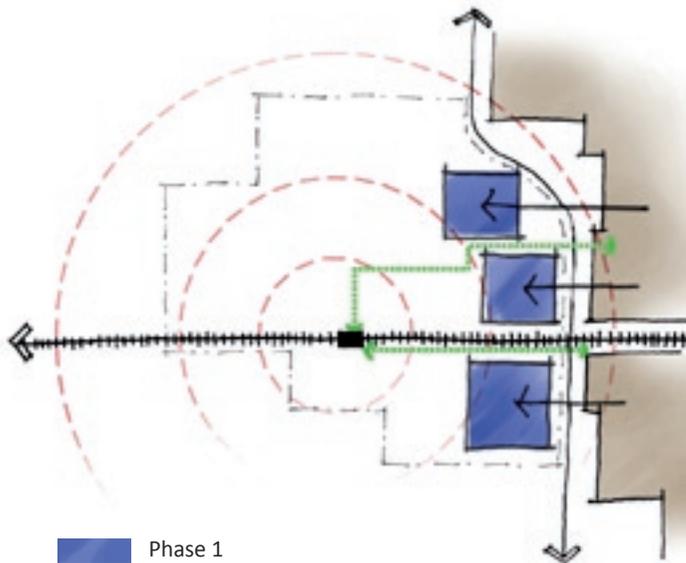
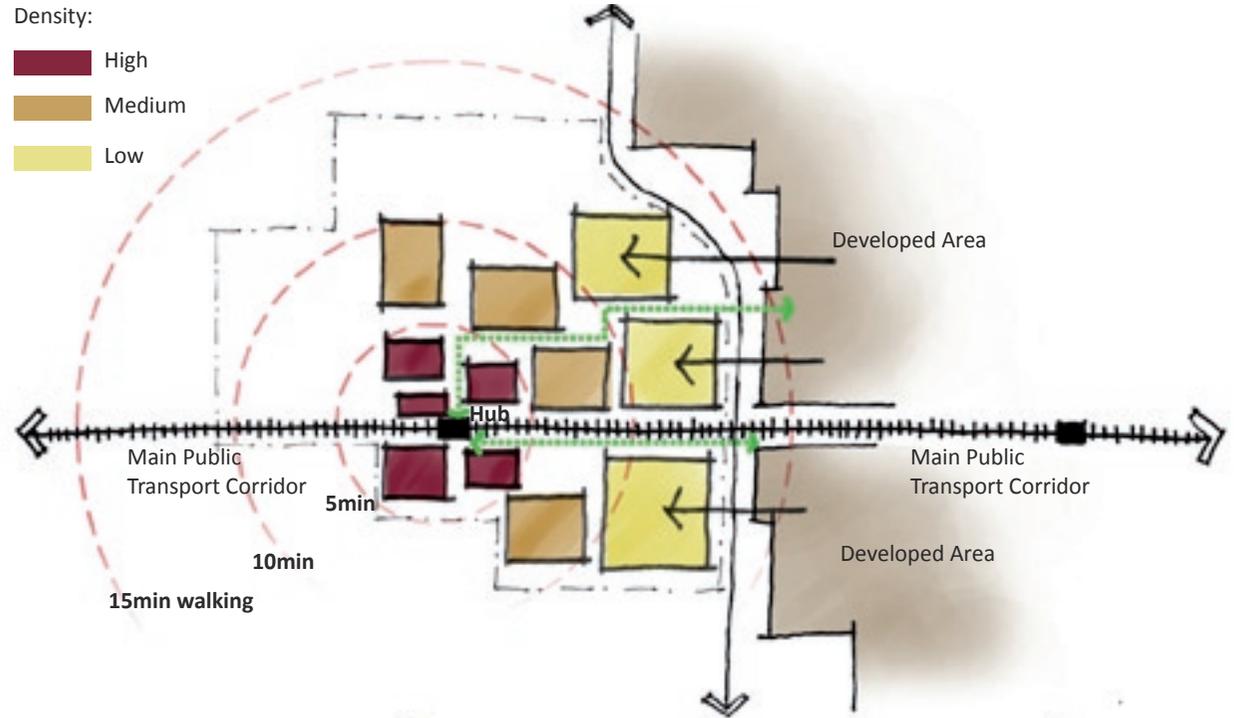
- Managed incremental development;
- Strong focus on managing public open space; and
- Quality linkages required.



G

G.6 EXPANDING CITY MODEL

- Expansion to existing development areas;
- Build on existing infrastructure; and
- Establish new links between existing developments and public transport hub.



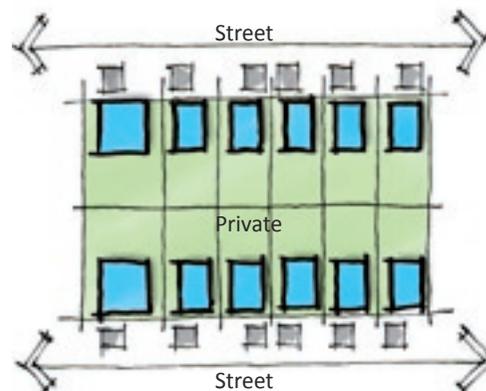
H: Development Mix

H.1 DEVELOPMENTS PATTERNS

The development patterns examined the mix of housing types that can emerge and how they can work together, their impact on density, open space, parking, public realm and streets. The assessment here reads from lowest density of detached houses to highest density of large-scale apartment development.

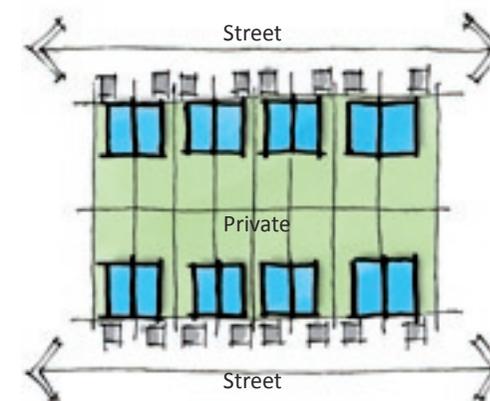
Pattern A (low density)

House types: detached
Open space: private gardens
Parking: private on site



Pattern B (low density)

House types: semi-detached
Open space: private gardens
Parking: private on site



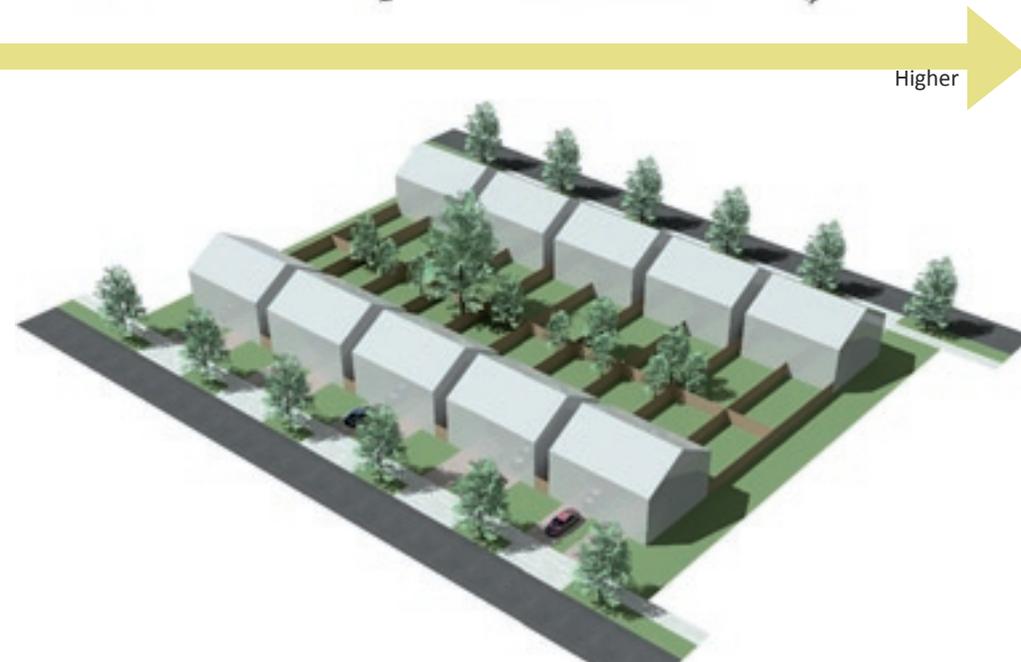
DENSITY

Lower

Higher

 detached  semi-detached

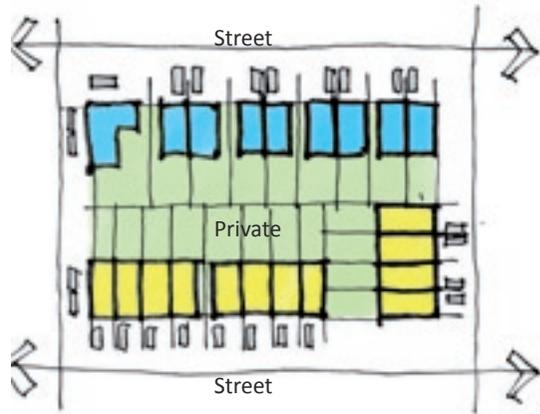
 private open space



H

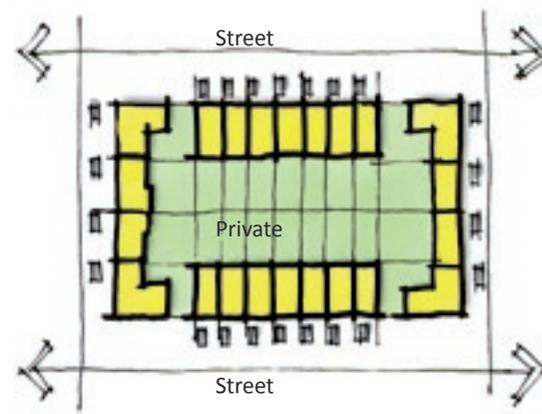
Pattern C (low density)

House types: semi-detached, detached, terraced
Open space: private gardens
Parking: private on site/ on street



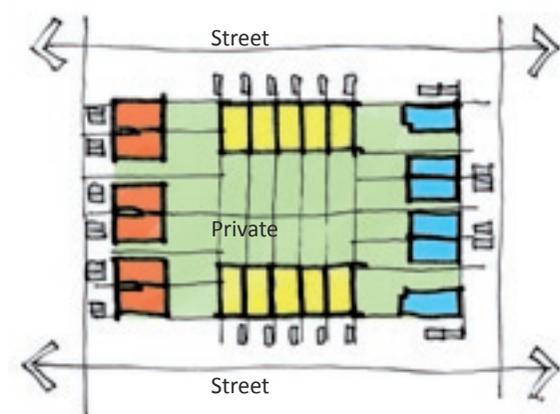
Pattern D (low,medium density)

House types: terraced
Open space: private gardens
Parking: private on site, on street, off street



Pattern E (low,medium density)

House types: semi-detached, detached, terraced, duplex
Open space: private gardens
Parking: private on site, on street, off street



DENSITY

Lower

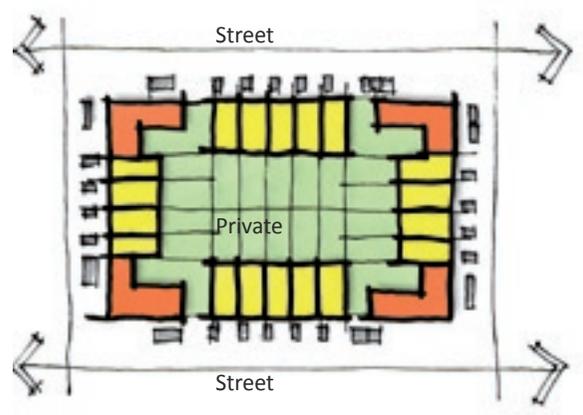
Higher

- detached
- semi-detached
- terraced
- duplex, corner apartment block
- private open space



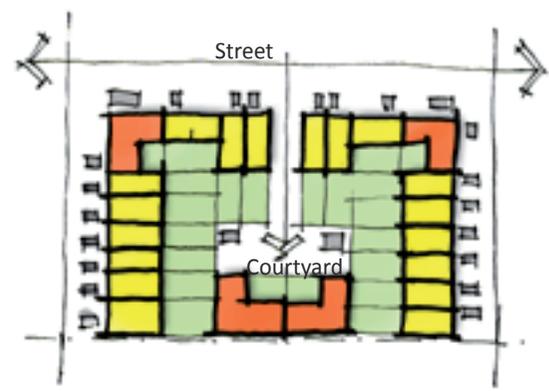
Pattern F (medium density)

House types: terraced, duplex, corner apartment block
Open space: private, semi-private gardens
Parking: private on site, on street, off street



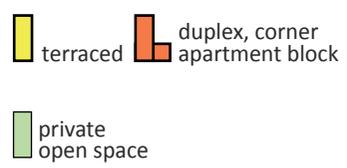
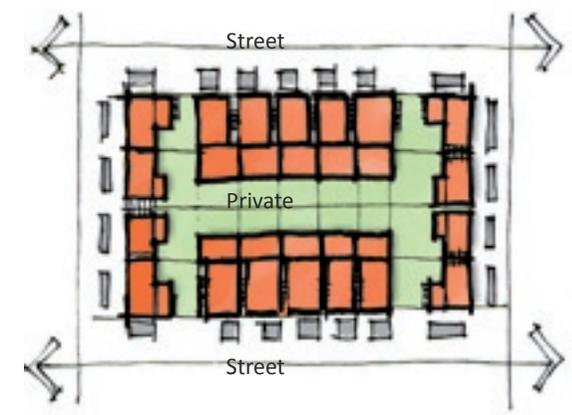
Pattern G (medium density)

House types: terraced, duplex, corner apartment block courtyard
Open space: private gardens
Parking: private on site, on street, off street, courtyard



Pattern H (medium density)

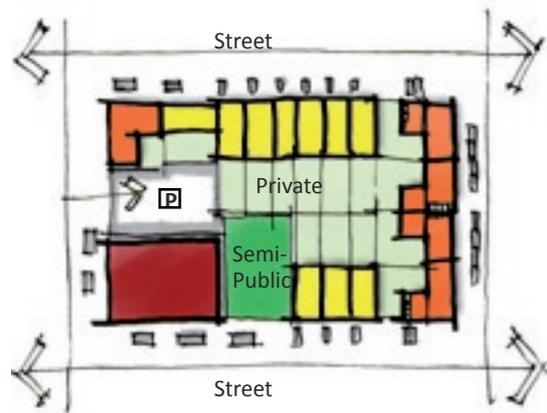
House types: duplex
Open space: private gardens, roof gardens, terraces
Parking: private on site, on street, off street



H

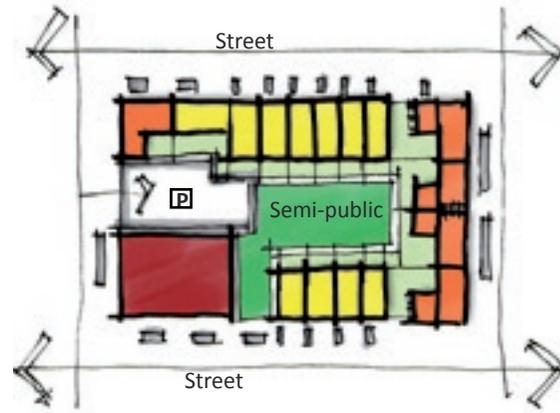
Pattern I (medium density)

House types: terraced, duplex, corner apartment block, smaller apartment block
Open space: private, semi-public (limited)
Parking: private on site, on street, off street, car park



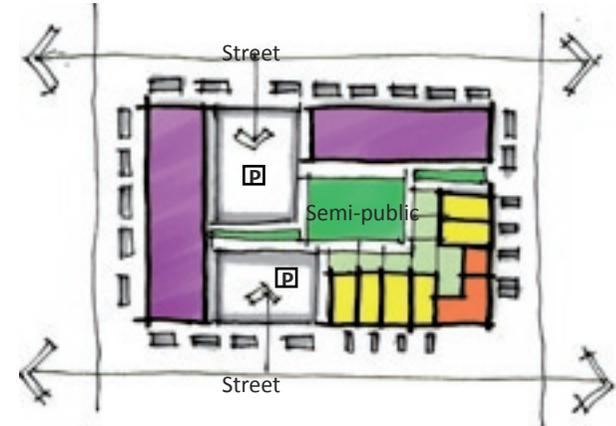
Pattern J (medium density)

House types: terraced, duplex, corner apartment block, smaller apartment block
Open space: small private gardens, semi-public
Parking: private on site, on street, off street, car park



Pattern K (high density)

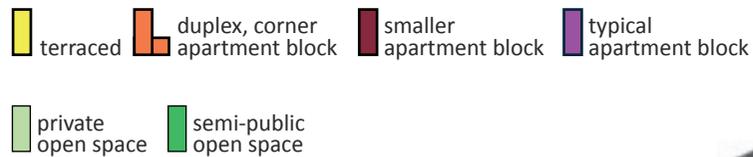
House types: terraced, duplex, corner apartment block, typical apartment block
Open space: small private gardens, semi-public (limited)
Parking: private on site, on street, off street, car park



DENSITY

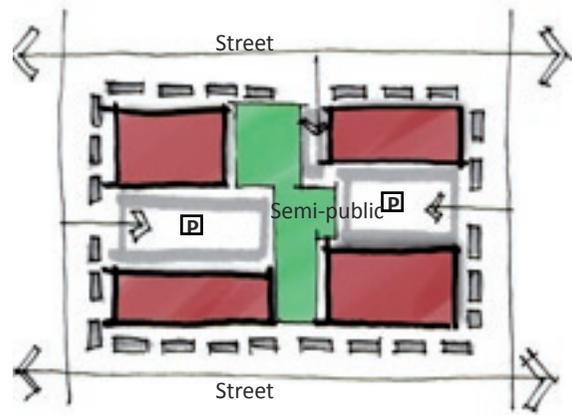
Lower

Higher



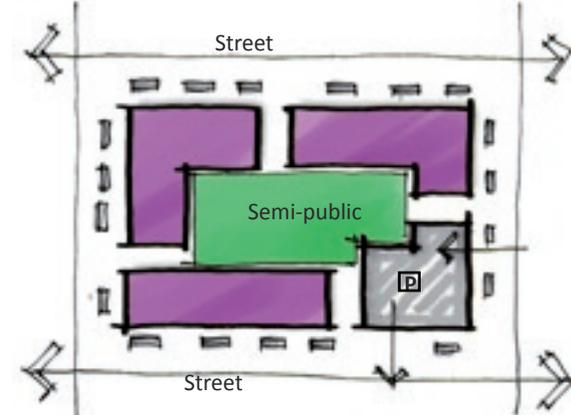
Pattern L (high density)

House types: smaller apartment block
Open space: semi-public (limited)
Parking: on street, off street, car park



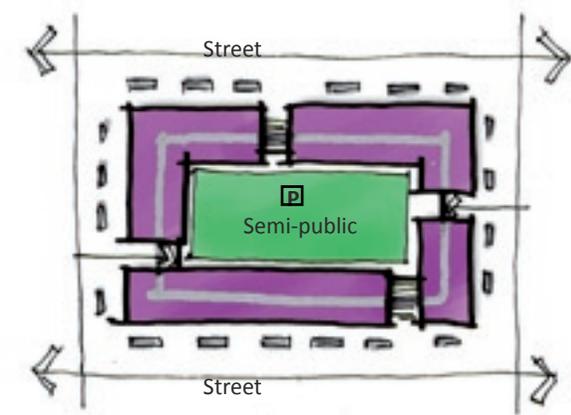
Pattern M (high density)

House types: typical apartment block
Open space: semi-public open space
Parking: on street, off street, multi-storey car park



Pattern N (high density)

House types: typical apartment block
Open space: semi-public open space (podium)
Parking: on street, off street, ground floor (podium type)

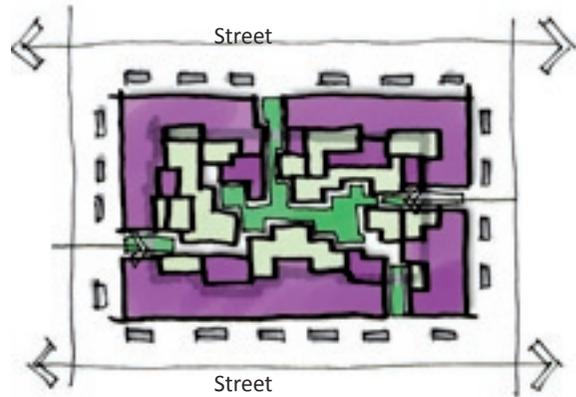


- smaller apartment block
- typical apartment block
- private open space
- semi-public open space

H

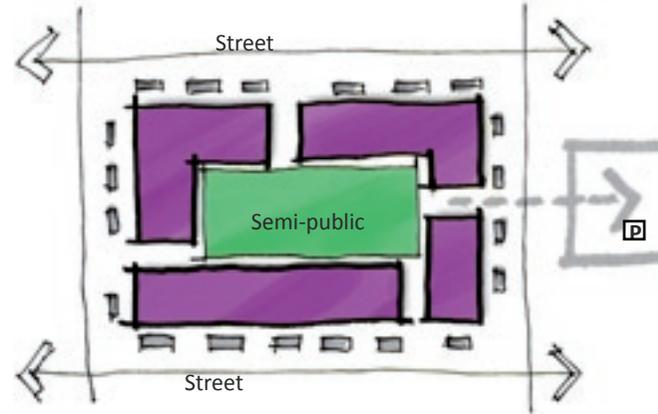
Pattern O (high density)

House types: smaller apartment block
Open space: semi-public (very limited podium type), increased private terraces, remote public open space
Parking: on street, off street, ground floor (podium type)



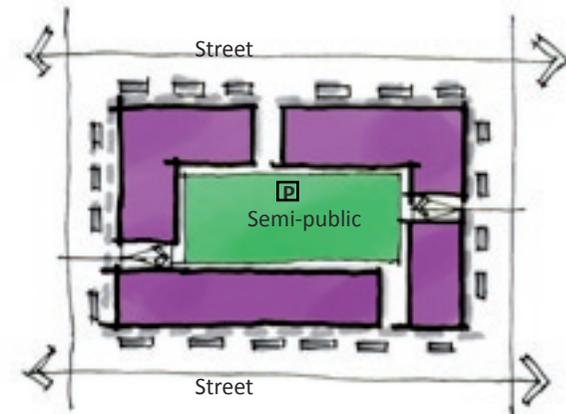
Pattern P (high density)

House types: typical apartment block
Open space: semi-public open space
Parking: on street, off street, remote car park



Pattern Q (high density)

House types: typical apartment block
Open space: semi-public open space
Parking: on street, off street, underground car park



DENSITY

Lower

Higher

 typical apartment block

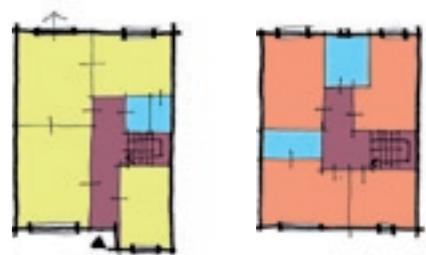
 private open space  semi-public open space



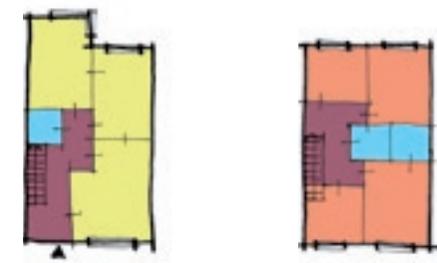
H.2 UNIT TYPOLOGIES

Detached
Description: 7.5m frontage
Bedrooms: 4
Height: 2 storey
Open space: Private rear garden (11m)

Semi-detached
Description: 6m frontage
Bedrooms: 4
Height: 2 storey
Open space: Private front garden



Ground floor First floor



Ground floor First floor

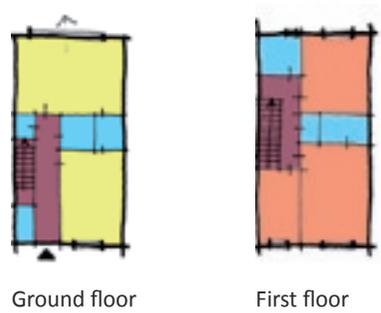


living, dining, kitchen areas
 bedrooms
 bathrooms, wc, storage, utility
 circulation
 patio, roof garden

H

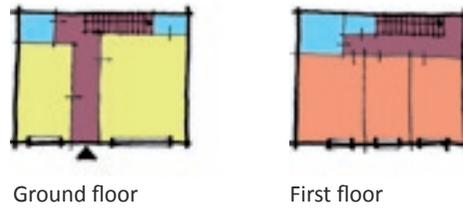
Terraced A

Description: Narrow frontage
Bedrooms: 3
Height: 2 (possible 2.5) storey
Open space: Private rear garden (11m)



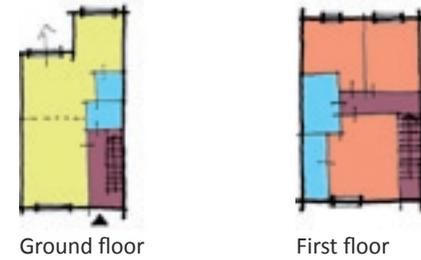
Terraced B

Description: Wide frontage, back to back
Bedrooms: 3
Height: 2 storey
Open space: Private front garden



Terraced C

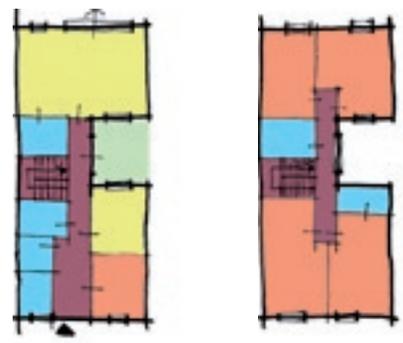
Description: Narrow frontage
Bedrooms: 3
Height: 2 (possible 2.5) storey
Open space: Private rear garden



living, dining, kitchen areas
 bedrooms
 bathrooms, wc, storage, utility
 circulation
 patio, roof garden

Terraced D

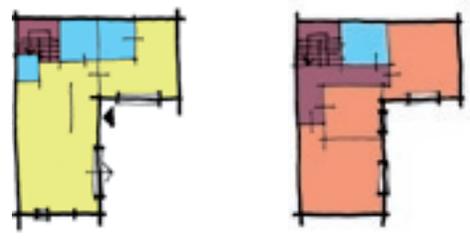
Description: Narrow frontage
Bedrooms: 4/5
Height: 2 storey
Open space: Private rear and internal garden (5m)



Ground floor First floor

Terraced E

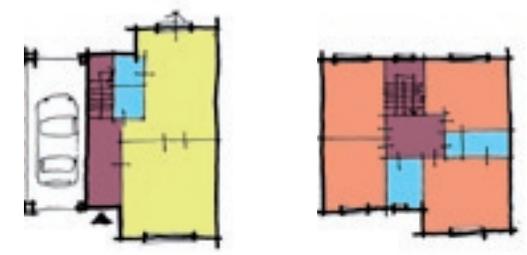
Description: Split frontage, courtyard house
Bedrooms: 3
Height: 2 storey
Open space: Front entrance court garden



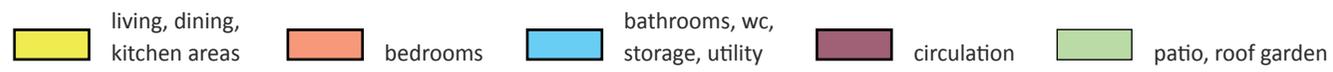
Ground floor First floor

Terraced F

Description: Wide frontage with car space
Bedrooms: 4
Height: 2 storey
Open space: Private rear or side garden



Ground floor First floor



H

Terraced G

Description: Mews
Bedrooms: 3
Height: 2 storey
Open space: Front entrance garden

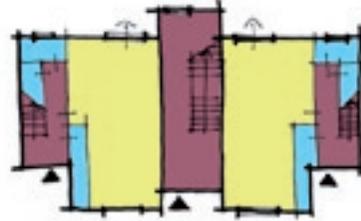
Duplex A

Description: Internal entrance hall, apartment above
Bedrooms: 2 x 1b, 2 x 3b
Height: 3 storey
Open space: Private rear garden, terraces

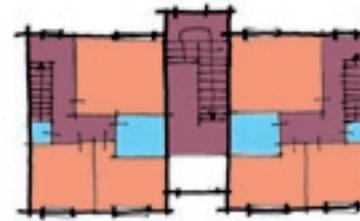


Ground floor

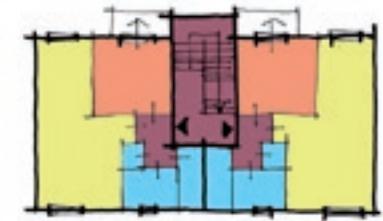
First floor



Ground floor



First floor



Second floor



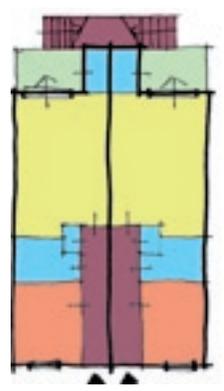
living, dining, kitchen areas
 bedrooms
 bathrooms, wc, storage, utility
 circulation
 patio, roof garden

Duplex B

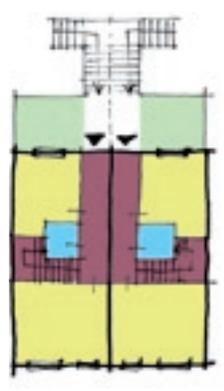
Description: External stairs, apartment below
Bedrooms: 2 x 1b, 2 x 2b
Height: 3 storey
Open space: Patio, terrace

Corner Apartment Block

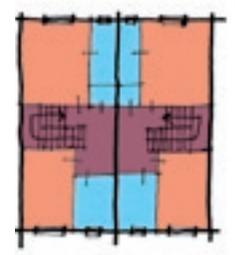
Description: Typical (3 apartments per floor)
Bedrooms: 1 x 2b, 2 x 2b per floor
Height: 3+ storey
Open space: Private terraces



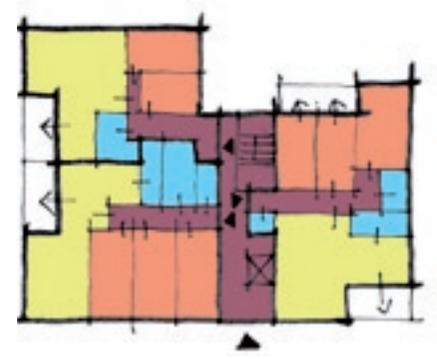
Ground floor



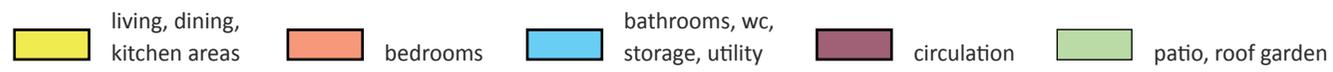
First floor



Second floor



Typical floor



H

Apartment Block A

Description: Low rise, small block
Bedrooms: 1 x 1b, 1 x 2b, 1 x 3b per floor
Height: 4/5 storey
Open space: Private terraces

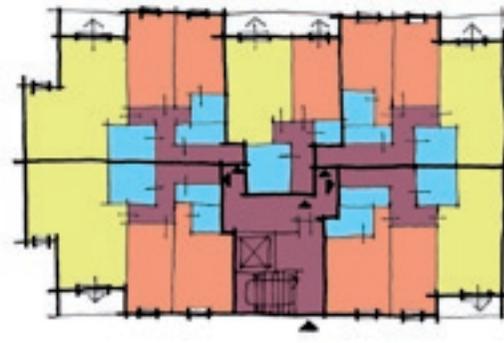


Typical floor



Apartment Block B

Description: Typical (5+ apartments per floor)
Bedrooms: 1 x 1b, 4 x 2b per floor
Height: 4+ storey
Open space: Private terraces

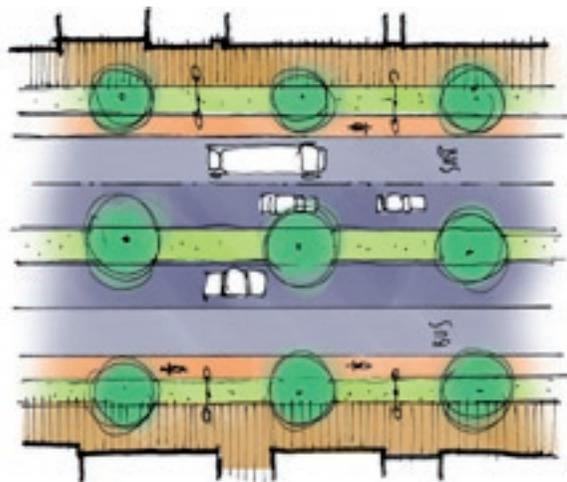


Typical floor

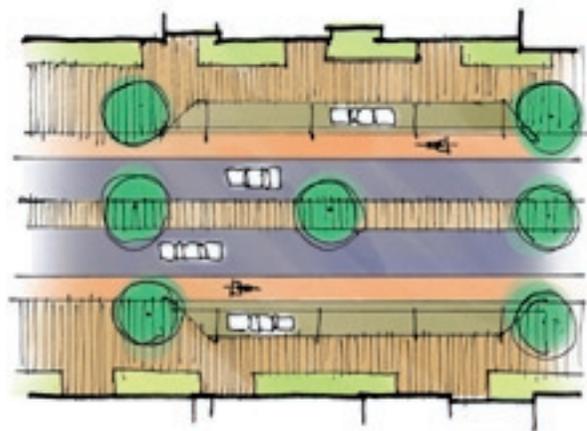


living, dining, kitchen areas
 bedrooms
 bathrooms, wc, storage, utility
 circulation
 patio, roof garden

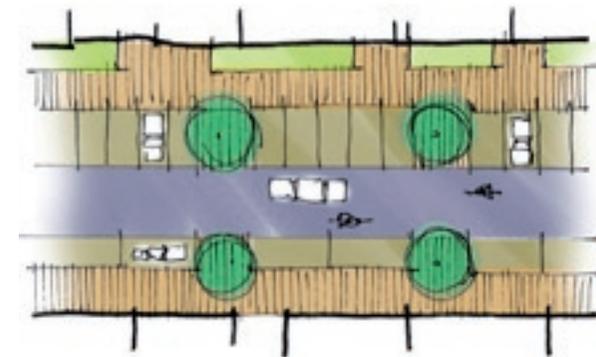
H.3 STREET TYPOLOGIES



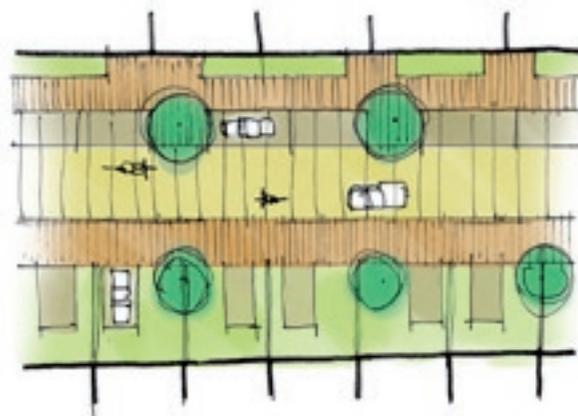
A. Distributor/ boulevard



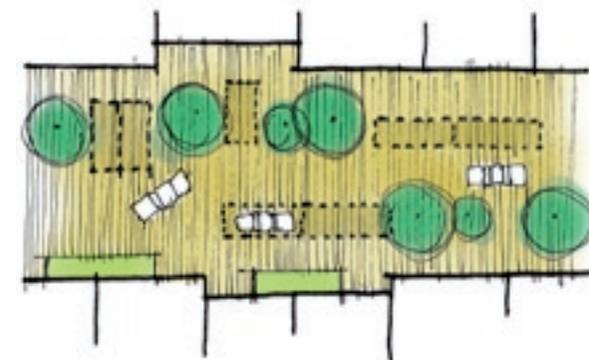
B. Main street / avenue



C. Secondary / local street



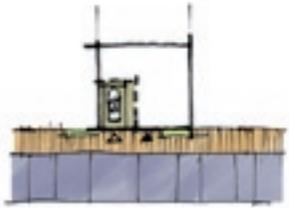
D. Side street



E. Shared, homezone

H

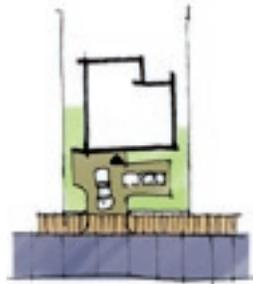
H.4 PARKING TYPOLOGIES



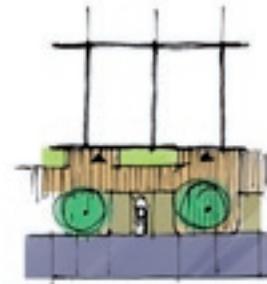
A. Internal garage



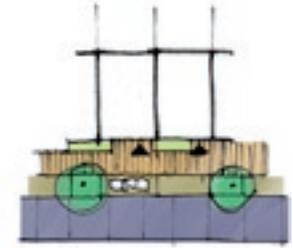
B. Side of the house parking



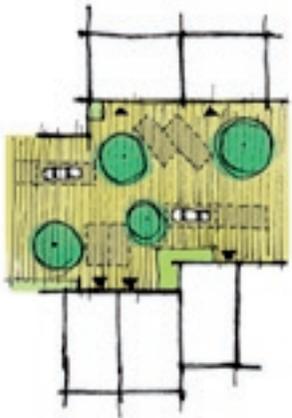
C. Front garden parking



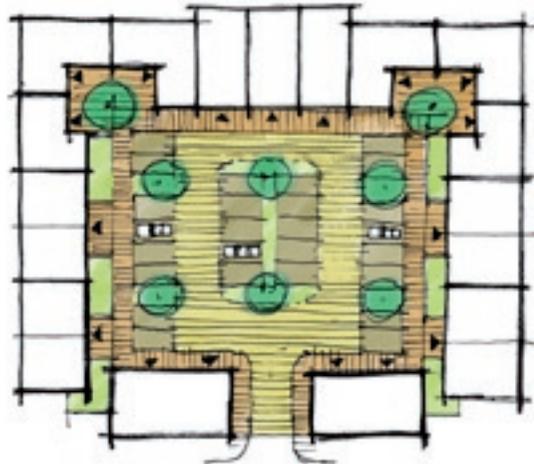
D. On street perpendicular parking



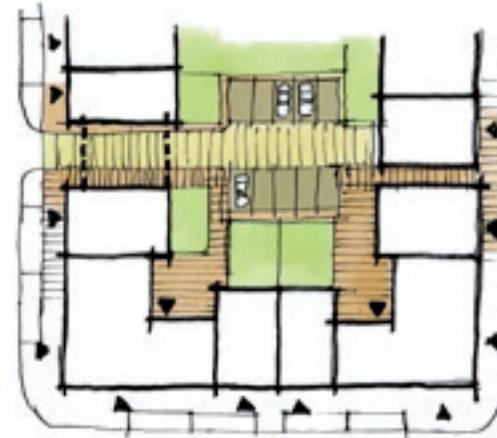
E. On street parallel parking



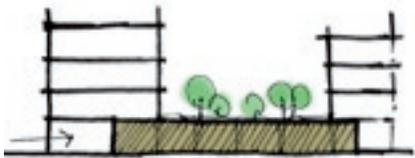
F. Homezone on street parking



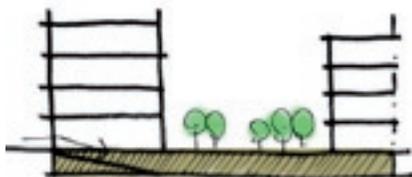
G. Courtyard parking (front)



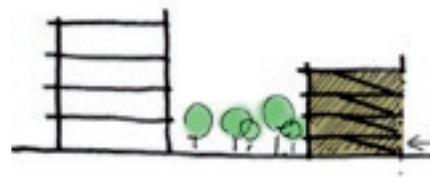
G. Courtyard parking (rear)



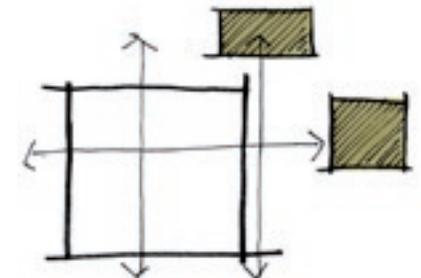
F. Single-deck parking



G. Underground parking



G. Multi-storey car park



H. Remote car park

H.5 OPEN SPACE TYPOLOGIES



A. Back garden



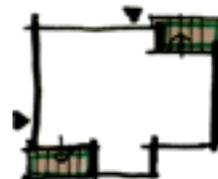
B. Small Back garden



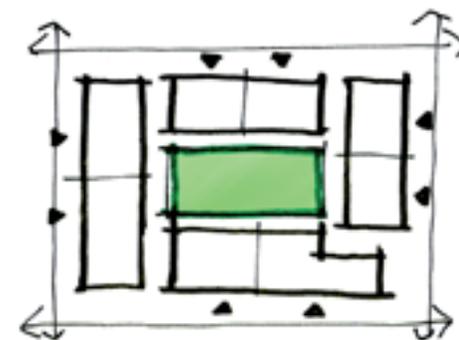
C. Front courtyard



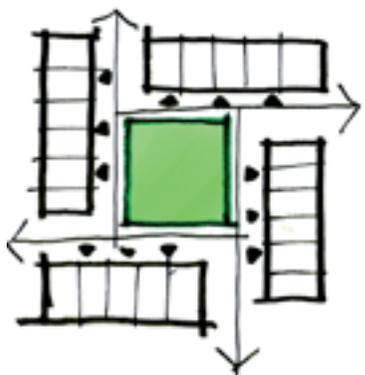
D. Internal patio



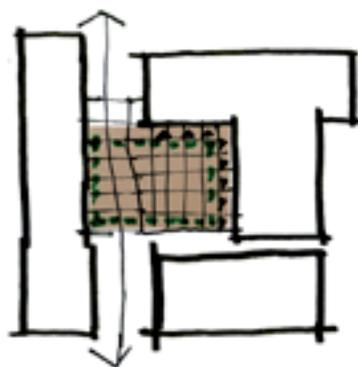
E. Terrace, balcony



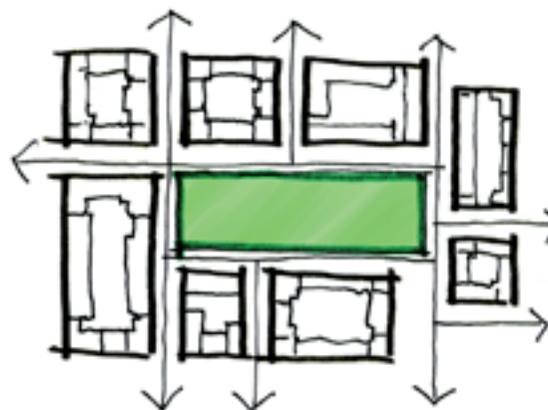
F. Semi-private courtyard



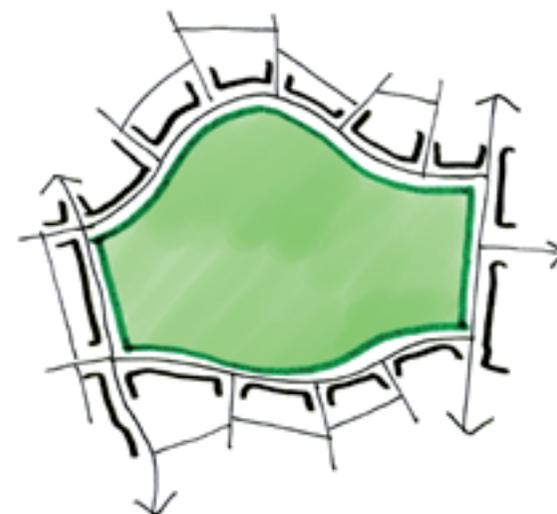
G. Public pocket park



H. Public square



I. Neighbourhood park



J. Regional park