



Stapolin Village Masterplan **DESIGNGUIDE**



ERSKINE • TOVATT
ARKITEKTKONTOR AB

in association with

DEGW

and

Cities Programme **LSE**

for

B ALLYMORE
PROPERTIES

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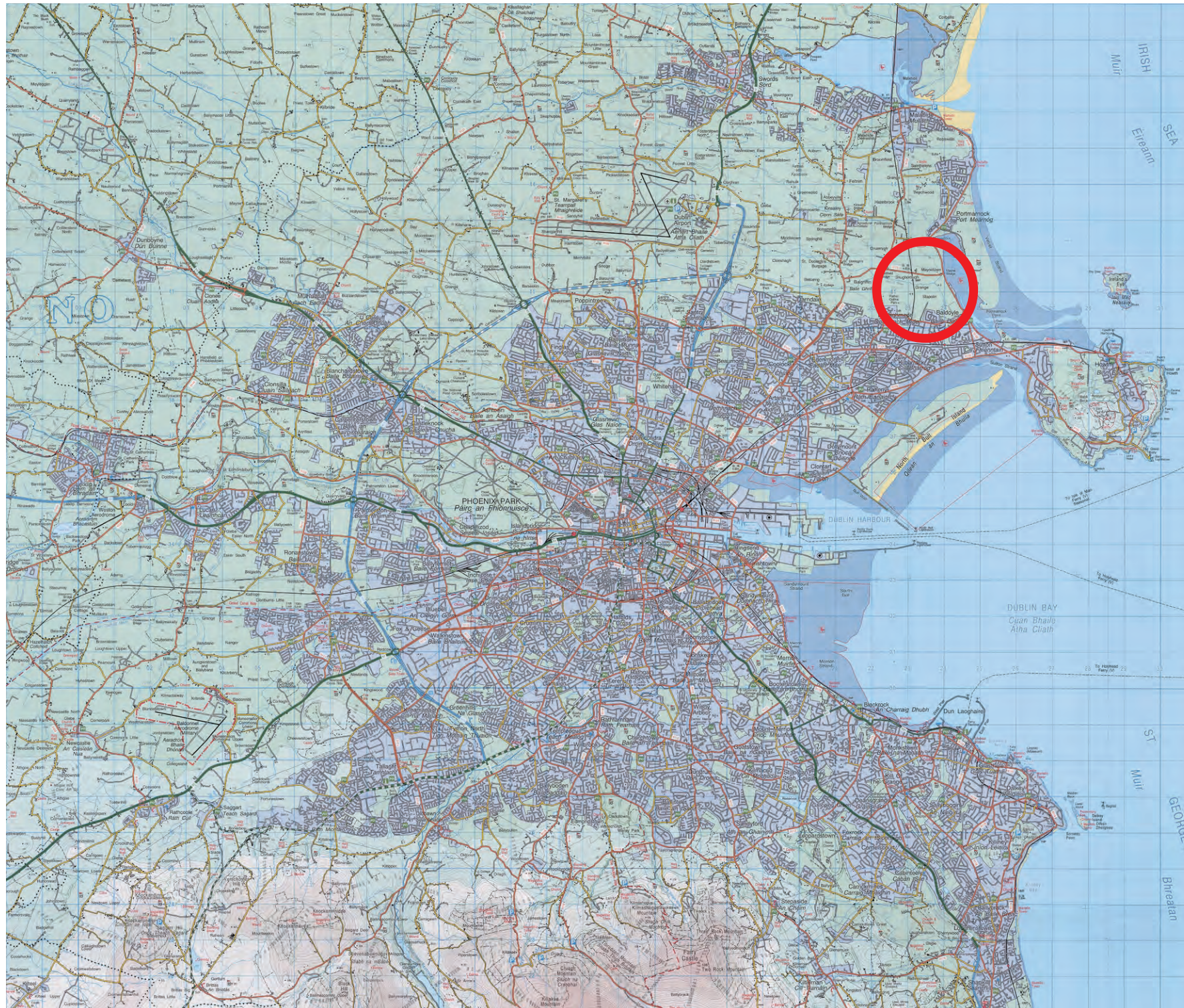
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Cover Illustration: Perspective of the Ireland's Eye Avenue. View towards Stapolin Haggard.

PREFACE



The Stapolin Village Site in the Greater Dublin context

Ballymore Properties' mission is to be a leading property developer in the residential and commercial sectors, with an unrivalled reputation for excellence and innovation. Furthermore we strive to be recognised as an ethical company, equally concerned for it's own employees, the community in which it works, and the environment in which developments take place.

With over 25 years experience, and headquarters in London and Dublin, Ballymore Properties Limited is widely recognised as an influential leader at the forefront of urban development and regeneration.

In Ireland and the United Kingdom, Ballymore has set new standards in all aspects of development activity - from planning to implementation, from marketing to final sale. Whether it is converting an existing building or originating innovative new schemes, Ballymore's performance remains consistently high.

In order to realise the design of the scheme for Stapolin Village, we sought European experts in the fields of urban design to assist our Irish consultants in meeting the high standards demanded of a quality scheme at the density required by Fingal County Council. We are happy that Erskine Tovatt and their co-consultants have not only met the standards required by the Action Plan but also the quality required by Ballymore Properties

PART ONE

INTRODUCTION & CONCEPTS



1.0.A *Aerial view of the Stapolin Village site looking north, with coastline beyond*

1.1	Introduction
1.2	Wider Context
1.3	Stapolin Village Masterplan Concept



1.1.A & B

The street is the principal structuring element of the Stapolin Village Masterplan

images from: Jan Gehl - Public Spaces and the Social Life of Cities

“...The design guide will set out the ground rules for the village, but encourages flexibility and innovation...”



This Design Guide has been prepared to clarify the aspirations, strategies and key design principles embodied in the Stapolin Village master plan, prepared by Erskine Tovatt Arkitektkontor. It is not intended to rigidly enforce particular working methods or design solutions, but to enable effective briefing of architects involved in the design of the various phases, as well as monitoring these to ensure quality and a consistency of approach. The design guide will set out the ground rules for the design of the village, but encourages flexibility and innovation within this framework.

One of the principal purposes of the Design Guide is to facilitate and encourage communication between the various consultants involved in the development, as well as between consultants and developer. The document will be used to brief new consultants or designers as these are appointed, and thereafter will act as the first stop reference point at all stages of project development. References to supplementary documentation should be necessary only when highly detailed information is required. The document should be used by consultants and developers both to inform their work and to assess whether it is compliant with the master plan intentions.

This document is structured in two main parts. Part One defines the context within which the master plan has been developed, as well as providing an introduction to the master plan in terms of its aspirations and principles. Part Two defines in detail the various strategies employed in the master plan and specifies the codes to be followed. Application of these codes to the various phases, may be dealt with in supplementary documentation.

Development of Stapolin Village will take place over a number of years, and in several phases, during which this document will ensure continuity of the fundamental principles embodied in the master plan. However, flexibility is built in to the document to ensure that it is adaptable to changing conditions over the development of the village. The separation of principles and their application into two different parts facilitates this.

“...and not forgetting the village’s eventual inhabitants-
whoever they might be!”



1.1.C *The village’s eventual inhabitants - whoever they might be!*
images from: Jan Gehl - *New City Spaces*

Stapolin Village Masterplan is currently structured in six (6) phases. The Design Guide will support consistency throughout the development as described above. Over and above this, the Erskine Tovatt Arkitektkontor will support the various consultants and will remain involved through dialogue, further studies/explanations and workshops. Preparation for ongoing communication has commenced and is, as this document is being printed, a natural part of the preparation of the planning application for phase one.

Erskine Tovatt Arkitektkontor will revise and update the masterplan as the project develops over time and a full participation in changes and improvements is envisaged.

Key Players:

- Ballymore Properties
 - Landowners and Village Developers

- Erskine Tovatt Arkitektkontor
 - Master Plan Architects

- Atkins McCarthy
 - Infrastructure and Ecology

- Simon Clear
 - Planning Consultant

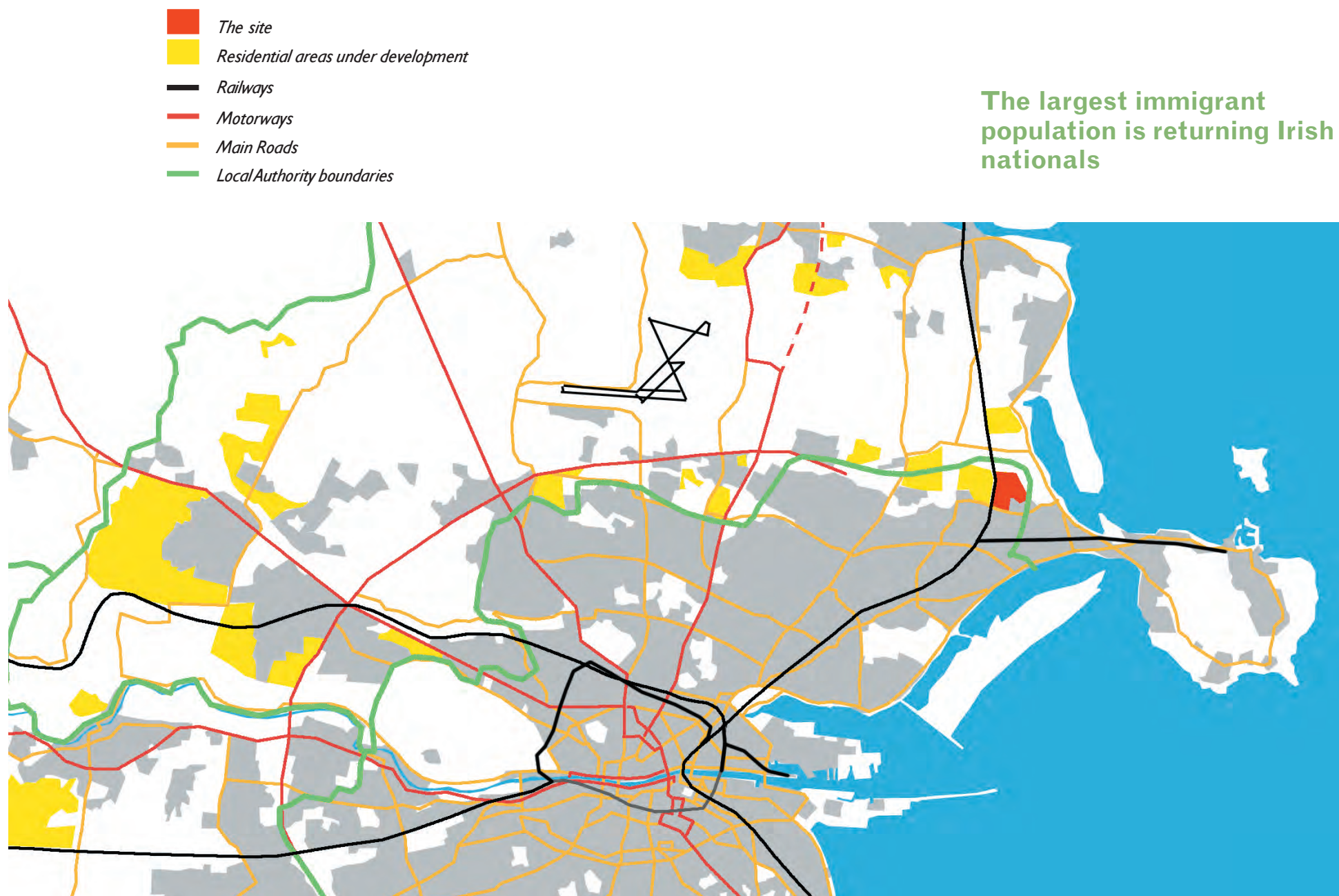
- Costin & Associates
 - Landscape Consultants

- DEGW
 - Master Plan Briefing and Design Code

- LSE - Cities
 - Sociology and Housing Consultants

- Fingal County Council
 - Local Authority

The population of the Greater Dublin area is expected to grow to **1.65 million** by 2011...



1.2.1.A New residential areas on the Dublin periphery

1.2.1 Dublin Renewal

In the past decade the Republic of Ireland has shown a dramatic increase in GDP, levels of employment, and population. Resulting in part from this economic development, significant demographic changes impacting on housing demand have surfaced.

The Dublin and Mid-East Regions together comprise the Greater Dublin Area (GDA), for which the Strategic Planning Guidelines (SPG) were published in March 1999. These set out the preferred direction for land use and transportation in the GDA for the period to 2011. They provide both the long term strategy and wider geographical context for future development and have been given statutory recognition in the Planning Act 2000.

At the 1996 census, the GDA had a population of 1.4 million accommodated in over 450,000 households. Fuelled by the buoyant economy, there has been net in-migration to the country since then, a significant proportion coming to the GDA. The SPG expects the GDA population to grow, both through natural increase and continued in-migration, to reach 1.65 million by 2011. The April 2000 annual review of the SPG indicated that this target could be reached by 2006.

Changing social circumstances, such as greater independence of young people and the break up of families (trends evident in almost every European country), are resulting in smaller average household size and therefore a greater number of households. This factor is even more significant than the increase in population. In 1996, the average household size in the GDA had fallen to 3.1, from 3.4 in 1991. Average household size is anticipated to fall to 2.5 by 2011.

In Fingal County average household size (3.5, 1996) is higher than that of the GDA as a whole (3.1). This is predicted to decline to 2.7 by 2011, compared to 2.5 in the GDA. To accommodate the expected growth the SPG proposes that an additional 253,000 households be accommodated in the GDA between 1996 and 2011, of which 51,000 are allocated to Fingal.

New residential areas are contributing significantly to Dublin's renewal ...



1.2.1.B The Baldoyle and North Fringe Sites on either side of the new station, with the Portmarnock zoned site to the north

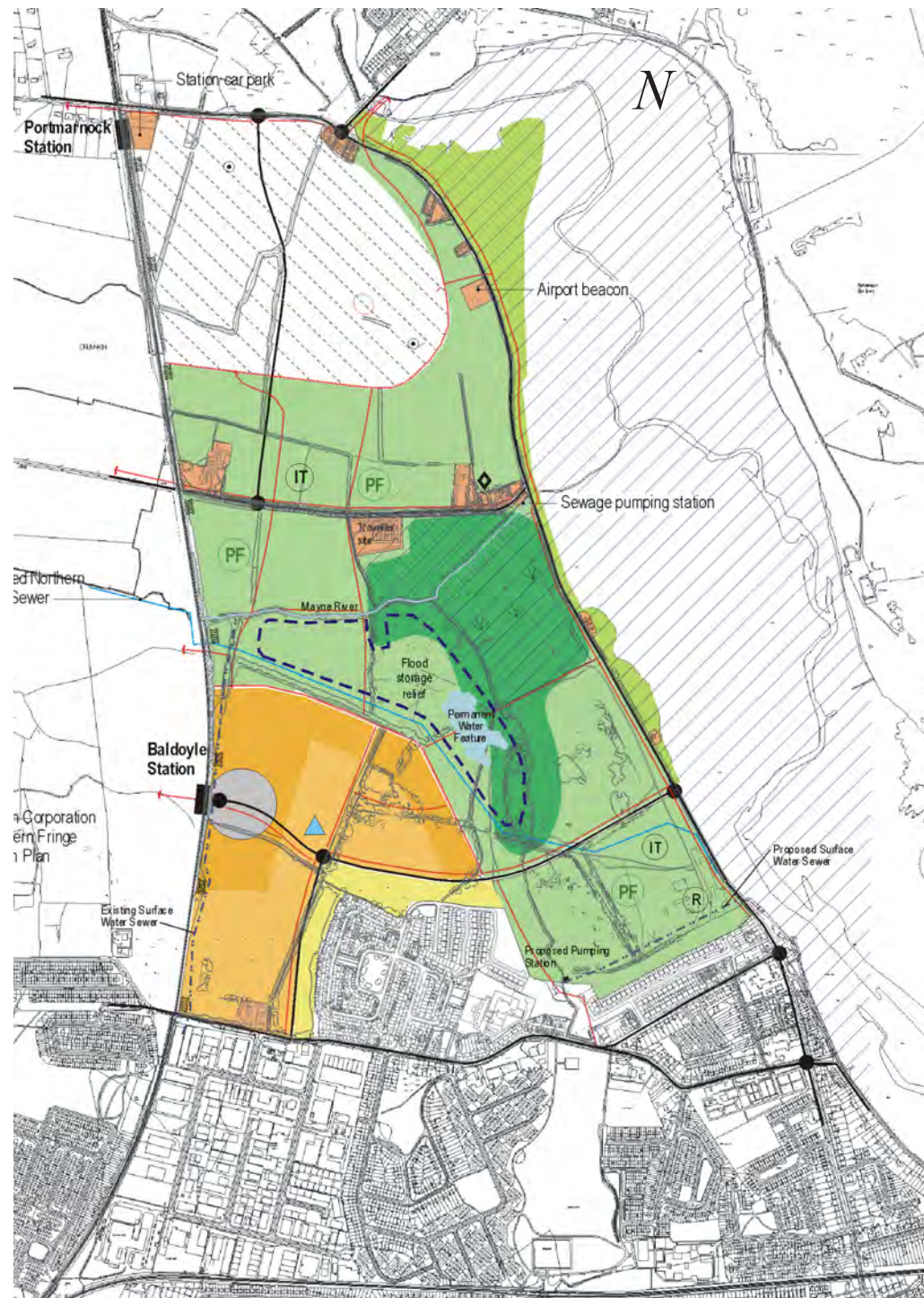
The Dublin Metropolitan Area described in the SPG, refers to the developed areas in the vicinity of the City. This area has the highest population density in the country, with 4,098 persons per km² (41 p/ha), compared to a national average of 52 per km² elsewhere. Nonetheless it is proposed to accommodate new growth by consolidating the metropolitan area in line with the principles of sustainable development:

- reducing growth in transport demand, especially private, by the development of an attractive public transport system as an effective alternative to the private car.
- by reducing urban sprawl and creating a clear distinction between urban and rural areas.
- increasing density of the Metropolitan Area to allow it to accommodate a greater population than at present.

Significantly, the largest immigrant group in the Metropolitan Area consists of returning Irish nationals. 11 per cent of the Irish population have lived abroad for a year or more. The Metropolitan Area has the highest percentage of these, indicating that the Dublin region is their preferred location on return. Immigrants, including returning nationals, are a significant contributor to the demographic trends noted above. Most are single and many are in their 20s. They prefer to settle in urban locations and, consistent with national trends, tend to live in smaller households. They have experience of a wide variety of accommodation typologies. A high proportion of affordable, smaller units is required in new development to satisfy these requirements.

Driven by these factors, the demand for new dwellings in the Metropolitan Area has increased every year since 1993, significantly outstripping supply. In Dublin the large number of new residential areas being developed, or earmarked for future development (particularly those identified in the Bacon III Report) are contributing significantly to Dublin's urban renewal.

Stapolin Village is a well-connected, new urban node, in a highly attractive coastal setting



1.2.2.A The Baldoye and Portmarnock Action Plan



1.2.2.B The site looking east



1.2.2.C Aerial view from Portmarnock south towards Howth

1.2.2 Baldoye Action Plan

A. Location

The Stapolin village development is located in the Metropolitan Area of Dublin, at Baldoye in Fingal, immediately adjacent to the Dublin City Council boundary. On its western side the mainline Dublin - Belfast railway, which is also a commuter and Dart line, borders the site. Immediately to the west of the railway line is the North Fringe Development Area, for which a separate action plan has been developed. The North Fringe is one of Dublin's larger new development areas and with Stapolin Village, the two will have some 10,000 new homes, as well as new retail and commercial areas.

The Stapolin Village mixed use residential development is relatively dense to reflect SPG policy for consolidation in line with sustainable development principles. It is a well-connected new Urban Node, with easy access to the airport, attracting a target market of those requiring an urban lifestyle, but with access to parkland, open space, wetlands and amenities, in a highly attractive coastal setting. Although the North Fringe and Baldoye development areas are located in different administrative areas, each will strongly impact on the other. Both sites share a new DART (commuter rail) station, to be provided jointly by the developers of each site.

B. Planning context

The Stapolin Village Master Plan has been prepared according to the Action Plan for lands at Baldoye and Portmarnock, voted by Fingal County Council in compliance with the requirements of the Fingal County Development Plan. The Action Plan covers the development area at Baldoye (this master plan) and an area of green belt between the Baldoye lands and the lands zoned for housing at Portmarnock to the north. The County Development Plan (November 1999) promotes sustainable development, so that new development should optimise employment opportunities to reduce social exclusion; mix uses to reduce vehicle trips; increase urban density and the sense of urbanity in urban areas; promote alternative transport; and protect sensitive natural areas. The two principal designations for the area are green belt and residential use.

“The development is to be fundamentally urban ...”



1.2.2.D & E An active, vital urban environment

images from: Jan Gehl - New City Spaces



1.2.2.F & G A green belt that provides both amenity space and open landscapes

images from: Naturbildbok



... the master plan encourages sustainability ...

The Baldoyle site is zoned residential, with the following relevant stipulations:

- Strong urban quality exploiting the urban facing location and the new Dart station.
- It should include substantial proportions of both social and affordable housing; in accordance with the adopted Housing Strategy.
- It should include a new local services centre;
- Existing residential areas should be improved, with a harmonious interface between old and new areas.

The Development Plan plans a new station on the railway line, making a transport node the focus of the new development. The Plans’ other relevant objectives include protection of sensitive landscapes and existing trees.

The Action Plan, based on the Development Plan, creates a planning framework to guide preparation of the master plan and further development of the area. It encourages sustainability through the principles of density, integrating uses, and integrating transport functions. The following three subsections indicate the main principles of the Action Plan.

C. An Urban Environment

The development is to be fundamentally urban, rather than suburban, in character. It is organised around a new mixed use node at the proposed DART station, and is at a higher density than the surrounding areas. The increased density will increase the volume of housing delivery and enable sustainable residential development. The site has a density gradient, highest around the station, and at the green belt edge - reinforcing the city-edge condition. The development should be integrated with existing residential areas, to avoid creating exclusive communities and allow existing areas access to new facilities.

D. The Green Belt & Landscape Strategy

Preservation of the Green Belt Zone has two principal objectives: conservation of ecological resources; and development of recreational amenities. Preservation of the green belt also conserves a distinctive landscaped edge condition to the city, separating outlying villages. This edge should also provide an interface between the open space and the residential areas, facilitating access to the green area, while also creating distinctive form through increased height and density.



Legend:
 - Transportation Corridor (Red line)
 - Future Transportation Corridor (Blue dashed line)
 - Metropolitan Area Boundary (Red dashed line)
 - Primary Development Centre (Red dot)
 - Secondary Development Centre (Blue dot)
 - Strategic Green Belts (Black area)

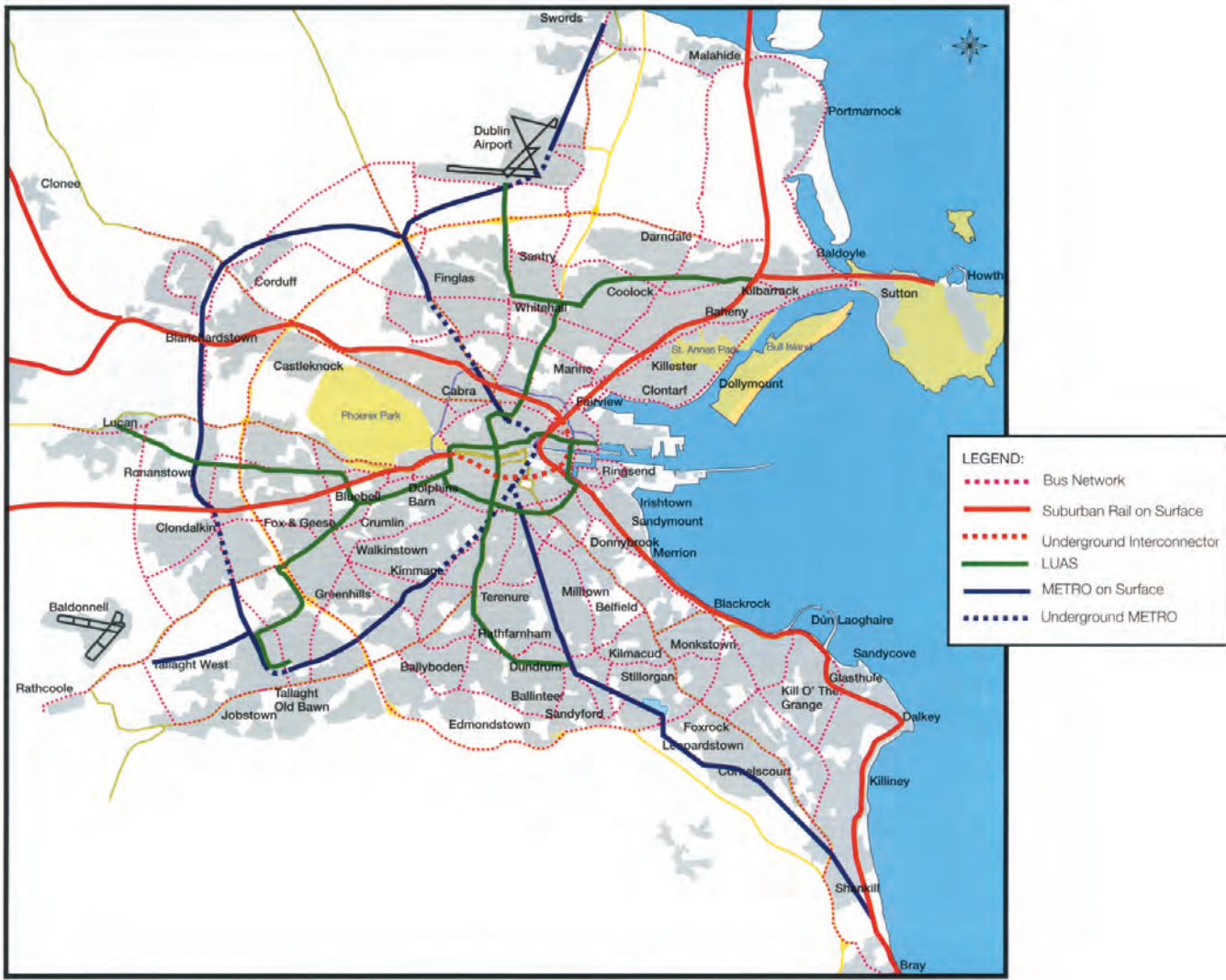
1.2.2.H *Dublin's Transportation Corridors*



Legend:
 - Suburban Rail (Red line)
 - DART (Blue line)
 - LUAS (Green line)
 - METRO (Yellow line)
 - Station (Red dot)

1.2.2.K *Dublin's proposed integrated rail networks*

The DART station is central to the transport strategy



1.2.2.L *Dublin's Transport Networks*

There are three main elements to the Green Belt Zone: the coastal amenity zone; the Mayne Marsh Conservation Area; and remaining parkland/farmland. These will be developed as a series of interconnected zones related to existing natural character and resources. Location of the zones and their relative ecological sensitivity dictates a graduation from formal recreation activities in the western sector, to informal ones towards the coastline.

Landscaping strategies for the green belt and built areas should incorporate existing landscape attributes, especially:

- Preservation of mature trees, which provide visual interest, shelter, and wildlife habitats;
- Waterbodies – two streams (one of which will be diverted under the Baldoyle phase two flood relief works) run across the green belt area, and there are various ditches, ponds and marshes controlled by the combination of rising water table in times of high rainfall and tidal conditions;
- Views to Howth and Ireland's Eye.

E. Transport and Movement

The DART station is central to the transport strategy for the area. It promotes sustainable development based on public transport by linking bus and train; and acts as an activity, movement and commercial focus. A small enclosed car park at the station, with short term commercial car parking, will allow limited park and ride facilities. Main routes through the development will include bus priority routes to serve the station. Bus routes will link the development to the Quality Bus Corridor at Malahide Road, and the proposed N32 bus corridor, via Mayne and Grange Roads. A dedicated bus route can be facilitated from the station through the adjacent North Fringe area, with a pedestrian link across the DART line. Footpath and cycle way provision is essential to the plan, acting as both transport routes and leisure spaces. The vehicular movement network facilitates access to the station, recreation facilities, and housing areas. This network will be designed as streets, not roads, i.e. functioning as spaces not just access routes. Local roads will therefore suppress car movement and have cycle and pedestrian priority.

All images this page copyright Dublin Transportation Office

1.2.3 Development Framework

Within the parameters of the Action Plan, the master plan is conceived according to a "Development Framework". This has four key aspects: The Capacity of the site for change; the Residential and Commercial Market; Transport and Access; and Environmental Character.

A. Capacity for Change

Development of the site is driven by its capacity for change. This is determined by the interaction of two factors – the site's physical capacity and its location. Physical capacity is determined by three factors: the planning framework, the market and infrastructure capacity. The locations' importance is evident in two respects: the site's strategic location on the Dublin -Belfast development corridor and its local integration with future development in the north city fringe sector.

B. Defining the Market

Phasing of the development will allow the developer to anticipate and to respond to changes in market demand.

Market analysis will determine size and quality of units to be built, in response to the socio-economic profile of the target market, including such factors as family size and income. Current demographic trends will indicate future requirements of the residential market. The scale of this development requires that a heterogeneous market is catered for, through a range of unit types.

The development will be mixed use, incorporating mostly residential units but also including retail and commercial uses. The number of residential units is defined in the Action Plan, as is the ratio of houses to apartments.

Commercial and retail demands are dependent on external and internal factors. Provision is determined by the size of the local market, and the extent to which current demand is satisfied elsewhere. Concentration of this provision in a high quality urban node around the station will attract a wider market. Internally, retail demand will be optimised by encouraging commercial (office) development, especially around the station node, to ensure an active daytime population. Mixed use also promotes efficient and sustainable commuting patterns and use of public transport. The master plan therefore optimises access and connections through the site, and to the wider area.

The site is strategically located ...



Strategic location of Baldoyle - North Fringe.
A new peri-urban node

1.2.3.A The site is strategically located in the Greater Dublin context



North Fringe - Baldoyle
In sum greater than the parts

1.2.3.B North Fringe & Baldoyle

Local Authority Area	1986	1991	1996
Dublin County Borough	502,749	478,389	481,854
Dun Laoghaire-Rathdown	180,675	185,410	189,999
Fingal	138,479	152,766	167,683
Kildare	116,247	122,656	134,992
Meath	103,881	105,370	109,732
South Dublin	199,546	208,739	218,728
Wicklow	94,542	97,265	102,683
Total	1,336,119	1,350,595	1,405,671

Movement	1993	1994	1995	1996	1997	1998
Emigrants	35.1	34.8	33.1	31.1	29	21.2
Immigrants	34.7	30.1	31.2	39.2	44	44.0
Net Migration	-0.4	-4.7	-1.9	8	15	22.8

Local Authority	1986	1991	1996
Dublin County Borough	154,754	159,775	173,085
Dun Laoghaire-Rathdown	51,018	56,531	61,469
Fingal	35,556	40,777	47,721
Kildare	29,813	33,067	39,041
Meath	27,015	28,868	31,863
South Dublin	49,974	54,875	61,809
Wicklow	26,114	28,187	31,263
Total	374,244	402,080	446,251

Local Authority	1986	1991	1996
Dublin County Borough	3.1	2.9	2.7
Dun Laoghaire-Rathdown	3.5	3.2	3.0
Fingal	3.8	3.7	3.5
Kildare	4.0	3.8	3.5
Meath	3.9	3.6	3.4
South Dublin	3.8	3.6	3.4
Wicklow	3.6	3.4	3.2

1.2.3.C Demographic trends in the Greater Dublin Area
from Strategic Planning Guidelines - Greater Dublin Area

The scale of the development will serve a heterogeneous market

The key to identity and a sense of place is the **quality of the Public Realm ...**



1.2.3.D *Perspective looking towards Station square*



1.2.3.E *Perspective from above platform looking into Station square*



1.2.3.F *A lively but cohesive urban character*

Public space should reflect the development's urban character

C. Transport & access

The Development Framework addresses transport and access issues at both strategic and local levels. Strategically the site is well located with potentially good airport connections, access to the Dublin - Belfast railway line, Quality Bus Routes, and vehicular access to National Primary Road infrastructure.

Within the development site itself, the master plan sets up a local hierarchy of movement responding to the Action Plan provisions. The system is designed to provide access without creating through-routes and to provide sufficient, but not excessive, parking.

D. Environmental Character

This aspect is essential for creating an identity and a sense of place for the area. The key determinant is the quality of the Public Realm. Structuring of public space should reflect the development's urban character, and is determined by the relationships between buildings, and between buildings and surrounding space. Landscaping is equally important, and is required to be diverse enough to reflect different environments within the site, within a unified whole.

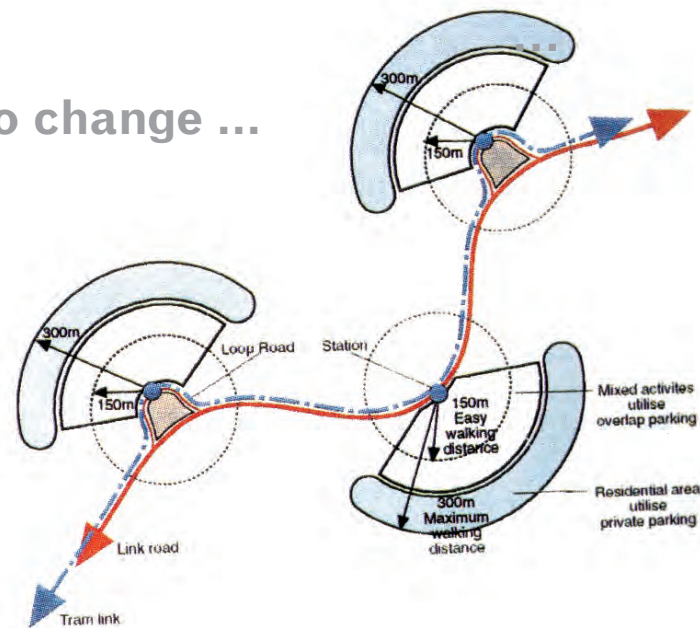
Integration of the site with the surrounding area will assist in the creation of diversity and a heterogeneous character, as will differentiation of the internal space according to a legible hierarchy. Architecture will need to create a sense of unity for the site, but be varied at the detail level. Achieving a lasting identity and character requires incorporation and preservation of aspects of the sites history, using existing memory traces such as pathways, vegetation and building remnants.

Sustainable development requires flexible environments



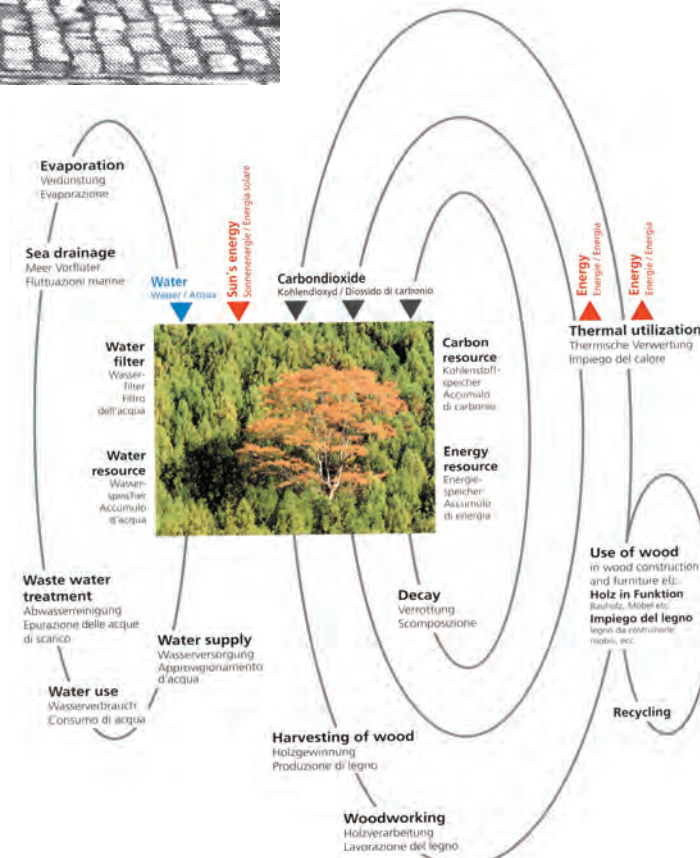
1.2.4.A Places that are safe and multi-functional

that can respond to change ...



1.2.4.B Diagram indicating comfortable walking distances around nodes on transport links

1.2.4.C Ecology cycles



1.2.4 Sustainability

Sustainable development requires flexible, active environments that can respond to change. The two aspects considered here are physical (environmental) and socio-economic. Although these are discussed separately, in fact they are indivisible; achieving one at the expense of the other is by definition not possible.

A. Environmental Sustainability

A combination of factors at every level, from the master plan layout and servicing to the orientation and construction of buildings, determine the development's environmental sustainability. These factors include transportation, distribution of uses, water and energy reticulation, landscape and ecology.

The development's transport strategy achieves high accessibility while encouraging the use of less resource consuming transport modes (i.e. public transport, cycling and walking) through compactness and the distribution and mix of functions, to create an intensity of local use. Individual building design, and relationships between buildings, embody aspects of climatic and energy efficient building design. Landscaping for the site aims to create ecologically sensitive environments by minimising hard surfaces and using indigenous planting.

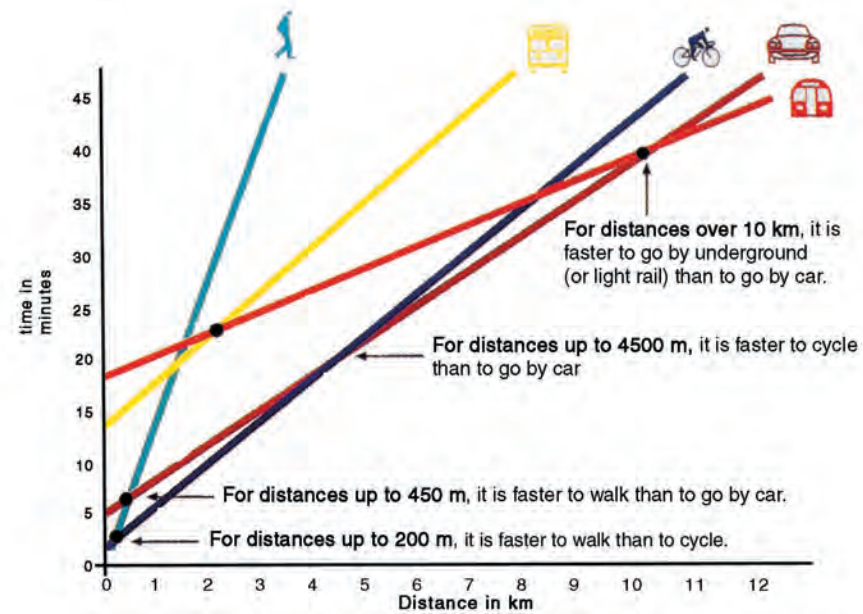
B. Socio-economic Sustainability

Socio-economic sustainability is about a healthy society and relies on various interwoven factors. Responsibility for the environment is linked to a sense of ownership and belonging, which is facilitated by a sense of local identity. The creation of a quality public realm, embodying principles of passive surveillance to create safe and secure places, is a key factor.

Equally important is the creation of opportunity for all members of society. This requires the provision of various amenities and employment opportunities, as well as social and functional integration. Flexibility of use and tenure, achieved through the provision of a variety of building types with the built in ability to change function over time, is essential to achieving this.



1.2.4.D Space required by one person for different modes at different speeds



1.2.4.E Travel times for different modes of transport in Urban areas

1.2.4.F Leaving an environmental legacy ...

Flexibility of use ... through a variety of building types



C. Policy Context

Planning for sustainable development in Fingal is influenced in a significant way by international, national and regional factors.

In the Irish context, national policies and funding are also significant influences on planning in Fingal. The context for sustainable development in Ireland has been established in *Sustainable Development: a Strategy for Ireland* (published by the government in 1997), which is intended to provide a comprehensive analysis and framework allowing sustainable development to be more systematically pursued in Ireland.

This document established a policy of more sustainable urban development through minimisation of suburban development and the promotion of higher residential densities in appropriate locations, in harmony with improved public transport systems.

The document provided the foundations for the *National Development Plan 2000-2006*. Building on recent economic progress, this aims to strengthen the foundations for further sustainable progress and has provided for the preparation of a *National Spatial Strategy*, now being developed.

At the regional level, the *Strategic Planning Guidelines for the Greater Dublin Area* were published in March 1999. These Guidelines provide a broad planning framework – and overall strategic context – for Dublin and the Mid-East regions. Fingal County Council participated in the preparation of these Guidelines and many of the proposals are included in the *Development Plan*, adopted in 1999.

In making the *Fingal County Development Plan*, regard was had to the *Dublin Transportation Initiative*; *Regional Water Strategy*; *Dublin Bay (Waste Water) Project*; *Regional Waste Management Strategy*; *National Anti-Poverty Strategy*; *National Coastal Zone Management Policy*; *Grenada Convention for the protection of the Architectural Heritage of Europe*; and *Residential Design Guidelines*.

Building homes for the 21st century requires the reinvention of values that produced the most human environments in the previous millennium

... central to this approach is the creation of an environment that is **Urban**



1.3.1.A The Stapolin Village master-plan, viewed from the south

1.3 STAPOLIN VILLAGE

1.3.1 The Stapolin Village: Design Philosophy & Key Aspirations

The cities, towns and villages most loved by both residents and visitors are those that have grown slowly, developing and adapting over a long period of time. The exceptional urban and environmental qualities that we esteem in so many of these were achieved with a very modest input of resources, and by a careful and evolving response to the needs of their inhabitants. The enormous urban growth we have witnessed since the start of the 20th century has seen these values largely forgotten, replaced by a checklist culture of planning and construction.

This culture has resulted in residential environments aimed at supporting only the leisure activities of residents, who are expected to be working elsewhere. There is therefore little or no provision for those sectors of the population that spend the majority of their time there, such as children, the elderly, people out of work or those working from home. To these residents, they offer very little either to facilitate social contact or to provide aesthetic stimuli.

Ballymore Properties approach to building homes for the 21st century implies the reinvention of attitudes and values that produced the most human and socially functional environments in the previous millennium. At the same time the environmental and ecological constraints of the present require a new approach to design and construction, demanding truly modern and sustainable architecture and planning. Central to this approach is the creation of an environment that is “Urban”, in the sense that it caters for diversity, defines a public realm and that it fosters flexible and organic growth.

The Stapolin Village will not only be home to thousands of people, but aims to be a part of something larger - a significant and natural part of Dublin. The Stapolin Village Masterplan has been designed bearing in mind its immediate context, but also to satisfy its new content and functions, as well as the opportunities it brings for future surroundings. The Stapolin Village has significant strategic importance in terms of its location. Over the coming years the areas adjacent to the new Stapolin DART station will be the stage for a sustainable urban-peripheral development. The strength of this greater area will be dependent on the success of the principles and aspirations laid out in this masterplan for Stapolin Village.

An urban expansion or redevelopment process often suffers from the uncertainty of future change



1.3.1.B Perspective along Ireland's Eye Avenue, showing the school hall to the right and local pub

Urban streets and urban places are designed for flexibility

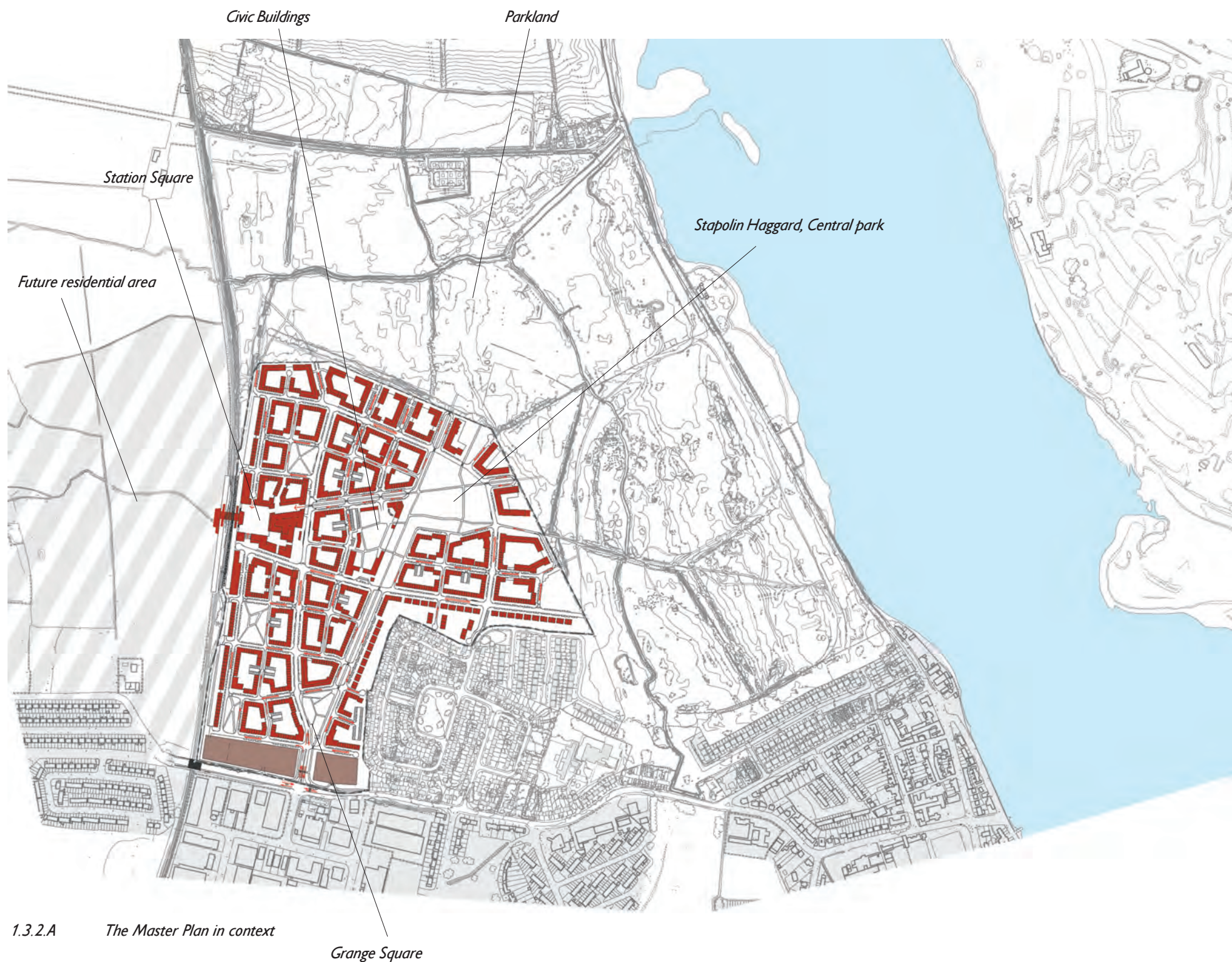
An urban expansion or redevelopment process often suffers from the uncertainty of future change. A master plan will always change during design development, due to unforeseen constraints or new demands. The philosophy and aspirations for the Stapolin Master Plan Design Code are informed by the conviction that they should allow this to happen. Urban streets and urban places, parks and squares, are designed for flexibility in terms of cultural and economic change, trends and demands. Time honoured urban qualities, such as those explored above, form a natural and fundamental part of the overall master plan design. Integration with the surrounding urban fabric, including a clear definition of future connections to adjacent growth areas, is a fundamental part of the master plan, its design code, and the implementation of the various built phases.

The variety of scale and functions - the mixed society we esteem in all well-functioning urban contexts - is crucial to the masterplan design. Apartments and houses, flexible usage and mixed tenure, commercial and public functions, public transport and parks, mutually form the framework of a sustainable and creative environment for life and activity. Thus it expresses those democratic ideals of respect for human dignity, equality and freedom, that are fostered in our European society.



Key plan perspective point

The masterplan is structured around the articulation of **public space**.



1.3.2.A The Master Plan in context

Grange Square

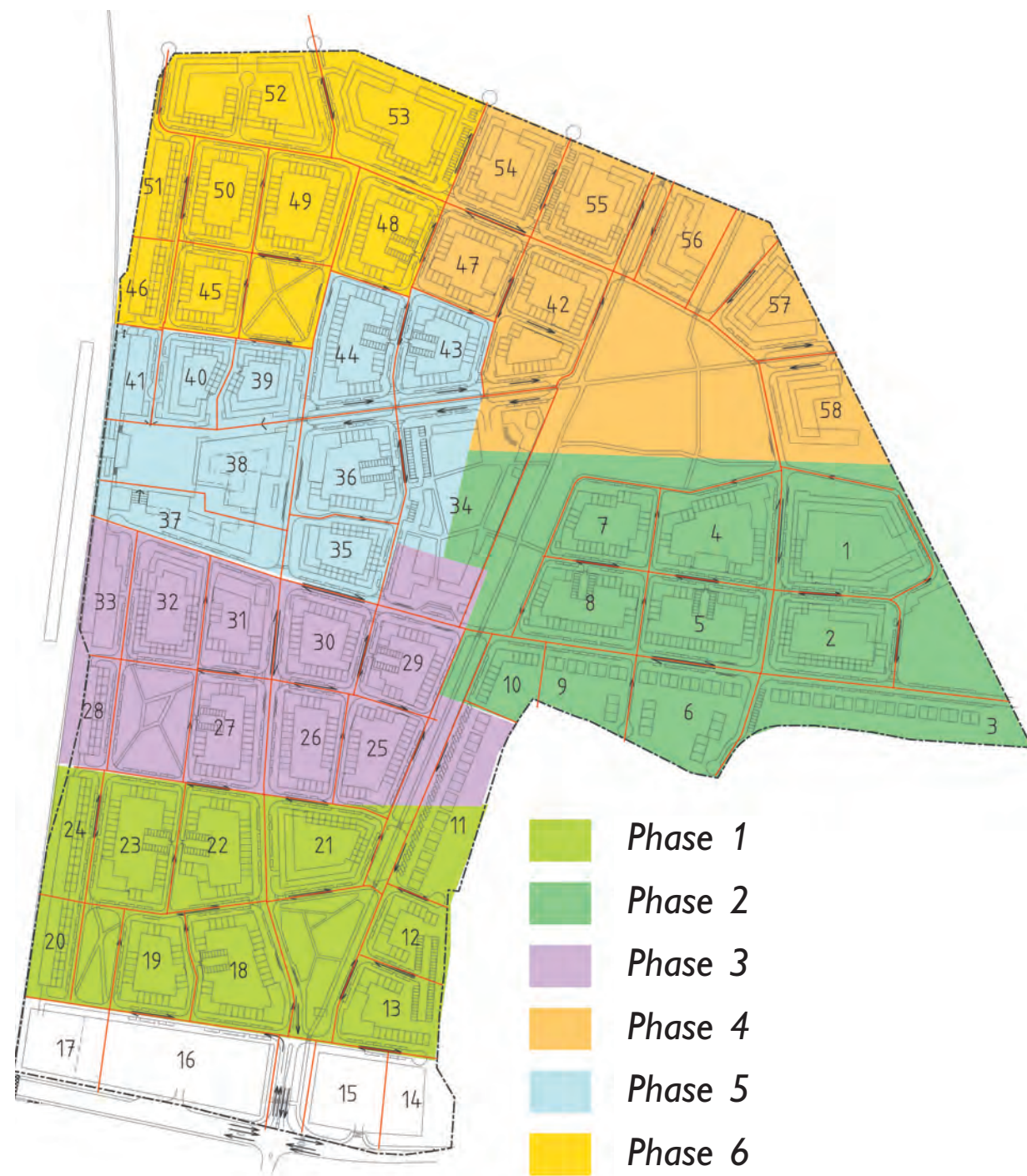
An integrated street network optimises permeability

1.3.2 The Masterplan Structure

The Master Plan is structured around the articulation of public space. In order to facilitate the functioning of cohesive communities, the public realm is strongly defined and leads the structuring of space within the Master Plan. A clear structure of formal public space is complemented by the informal public space network of streets and local squares. The definition of space in these areas is oriented around shaping “outside rooms” rather than simply facilitating the movement of people and goods.

Within this conceptual framework the master plan is functionally differentiated by the creation of various nodes. A retail and commercial hub is located around the new station. Stapolin Haggard provides the prime central heart in terms of function and space, incorporating schools, community and leisure facilities. At the southern end of the site a threshold and entry space is created by Grange Square, set behind a series of buffer buildings along the thoroughfare of Grange Road.

The masterplan is structured to integrate the site into the wider area as well as to facilitate connections across it. The links between the green belt and the village, as well as to other areas, inform the organisation of the various edge conditions. Pedestrian links are provided and facilitated across the railway line to the proposed new development on the North Fringe, and the permeability of the site is optimised by the use of an integrated street network. The masterplan structure is described in more detail in the following section.



1.3.3A Phasing and Block Diagram

1.3.3 Phasing and Implementation

An indicative Phasing Diagram is illustrated at 1.3.3A. Some of these phases may be constructed concurrently rather than as shown, though this will of course depend on favourable market conditions. It is intended to bring elements of the civic centre on stream commencing during phase 3 of the development works as the commercial element of the development needs to be sustained by a critical residential mass as well as by the provision of the railway station by Iarnród Éireann.

Table seven of the Greater Dublin Area Planning Strategy Consultative Draft estimated current (2001) spending per head of population at Euro 2,738 rising to Euro 2,993 in 2006. Turnover/Sq.m in the G.D.A was calculated at Euro 11.157 sq.m for convenience floor space. The average turnover/sq.m for convenience floor space in the G.D.A appears very high because it includes many large super stores. The convenience store provision at Station Square of 1,000 sq.m will require 1,358 units occupied based on 2001 rates. This will determine the timing of provision of the commercial buildings. This should be kept under review having regard to changes in household expenditure on convenience products.

Phase	No. of units	Construction period
Phase 1	400 units	2002 - 2004
Phase 2	500 units	2003 - 2006
Phase 3	400 units	2006 - 2008
Phase 4	400 units	2007 - 2009
Phase 5	450 units	2009 - 2011
(Phase 5 include 9100 sq.m Commercial space)		
Phase 6	450 units	2010 - 2012

PART TWO

KEY DESIGN CODE STRATEGIES



- 2.1 Urban Structure

- 2.2 Transportation & Connections

- 2.3 Urban Detailing & Landscape

URBAN STRUCTURE

2.1



2.1.1. Spatial structure

The key driver of the Master Plan is the structuring of public space, made up of both "formal" public space (parks and squares) and "informal" space - the streets and boulevards. The main structuring elements of the plan are two broad, tree-lined pedestrian boulevards linking the three major public spaces of the village. These also extend the parkland into the village, by opening up views of the green belt from the Station and Grange Squares - the two major points of entry to the village, and by bringing the greenery through the village. Ireland's Eye Avenue is oriented to frame a view from the Station and from Station Square of Ireland's Eye itself, while Stapolin Way runs along the line of an existing avenue of trees and farm track.

The two boulevards intersect at the "community heart" forming an acute angle, at the village common - Stapolin Haggard - opposite. This is the major central public space of the village, a "village green" in the Anglo-Irish tradition. Ireland's Eye Avenue links the park to the other principal public space of the village - the Station Square. Station Square, at the village public transport hub, is at the heart of the village's retail and commercial centre. It is an intimate but vibrant, busy and active space.

The village also contains a series of smaller local parks, or greens. Principal amongst these is Grange Square at the Southern end of Stapolin Avenue, just north of the entry into the village from Grange Road. All of these spaces lie on the interconnecting network of pedestrian and cycle priority routes.

The remaining public space is made up of the network of streets that structure the various character areas of the village, as well as the individual blocks, according to a clear hierarchy. The two major public transport and vehicular routes through the village form a cruciform, with Racecourse Way running east west, allowing access from Coast Road to the east, and Mayne Street running north south, providing access from Grange Road to the south.

2.1.1.A The Stapolin Village Master Plan

The structure of **Public space**
... is the key driver of the master plan.



2.1.1.B The wider public space network



2.1.1.C Green public space network



2.1.1.D Station Square and local squares - urban public space



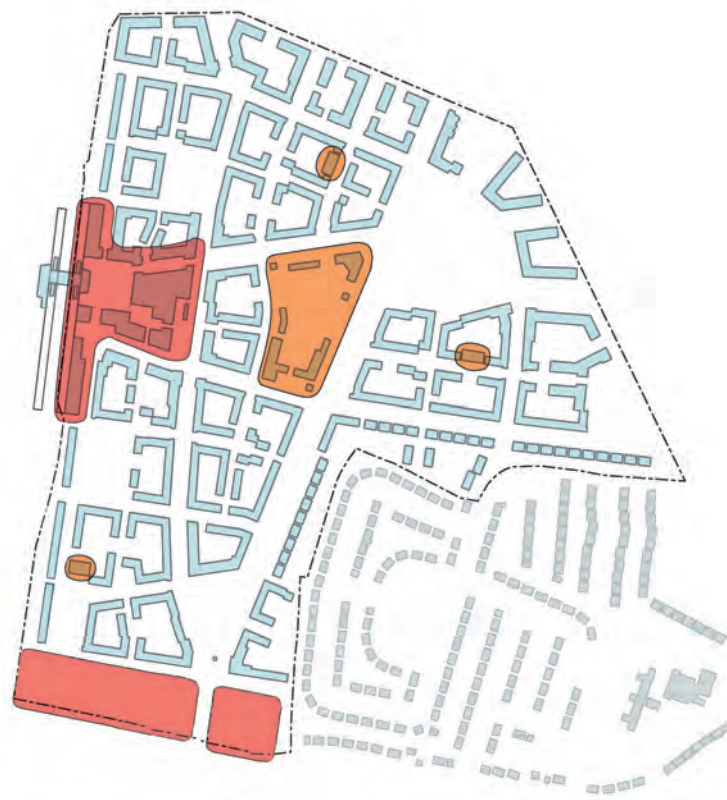
2.1.1.E Character Areas

A filigree network of lanes and mews function as intimate, “people friendly” spaces for local residents.

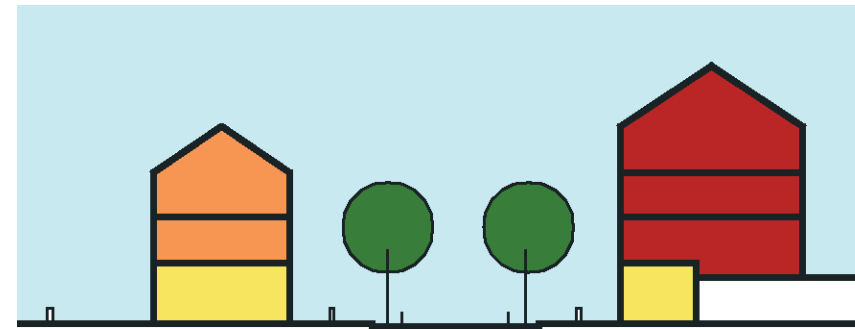
Racecourse Way and Mayne Street meet at the commercial node around Station Square. These two streets, along with the two boulevards, help to define the various character areas (local neighbourhoods) that make up the village. Stapolin Way links the two main streets in a curve through the north-east quadrant of the village, providing access to these areas for vehicles and public transport.

The character areas contain a filigree network of lanes and mews, providing access to the blocks and individual houses, and functioning as intimate, “people friendly” spaces for local residents. This network connects a number of local squares, each serving as the centre of a local neighbourhood or character area. The blocks within the character areas are perimeter blocks with apartments or terrace houses enclosing sheltered, private internal courtyards. Within the character areas, architectural and landscape treatment should facilitate local definition, while remaining part of a cohesive whole.

The site has four specific edge conditions, and the village is integrated into its surroundings by the different treatment of these edge conditions. On the green belt edge green fingers link the village into the parkland. Against the railway low covered garages buffer the village from the line, except at the station where the commercial node and station link across to the neighbouring North Fringe area. At Grange Road commercial sites provide a robust and active frontage to the road, as well as screening the village from the heavy traffic associated with this route. Around the existing residential area to the south-east of the site, semi-detached houses with long back-gardens seamlessly mediate between the new and existing residential areas. A discrete link at one point between the two may be provided to facilitate existing residents access to the facilities offered by the new development.

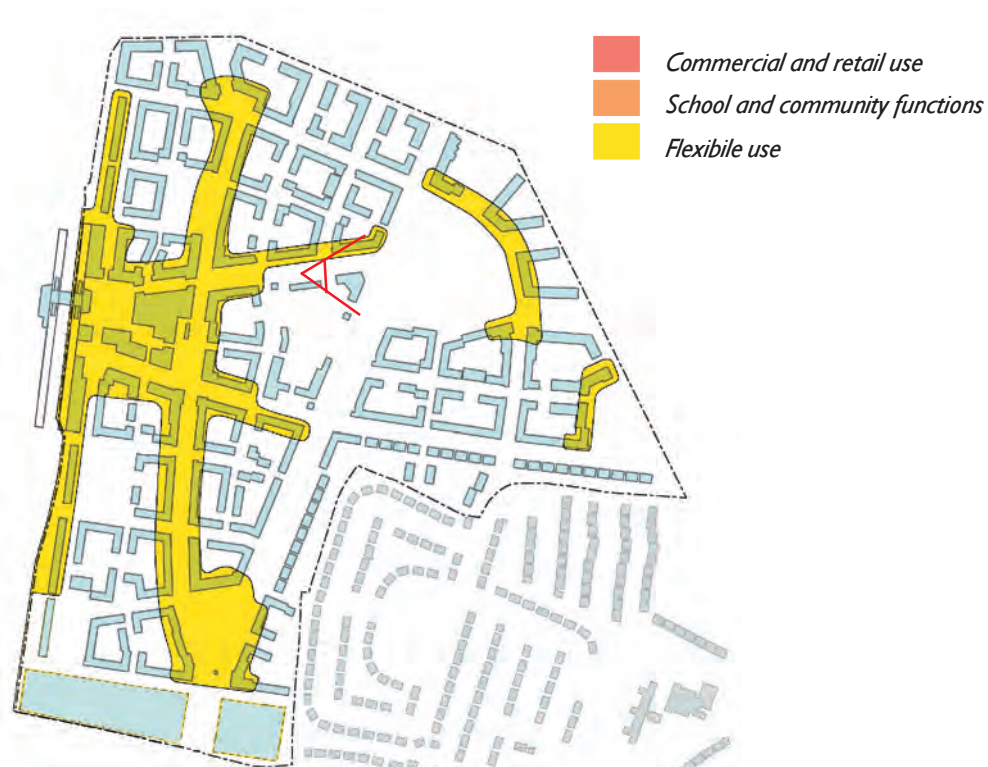


2.1.2.A Plan indicating distribution of uses



2.1.2.C Generic section indicating raised ground floor ceiling height to accommodate flexible use

Flexibility is a key factor in ensuring long-term sustainability



2.1.2.B Plan indicating zones of flexible use

2.1.2.D Perspective indicating ground floor area retail uses on Park Street



An active, working, urban environment requires a mix of uses to support its residents

A. Flexibility

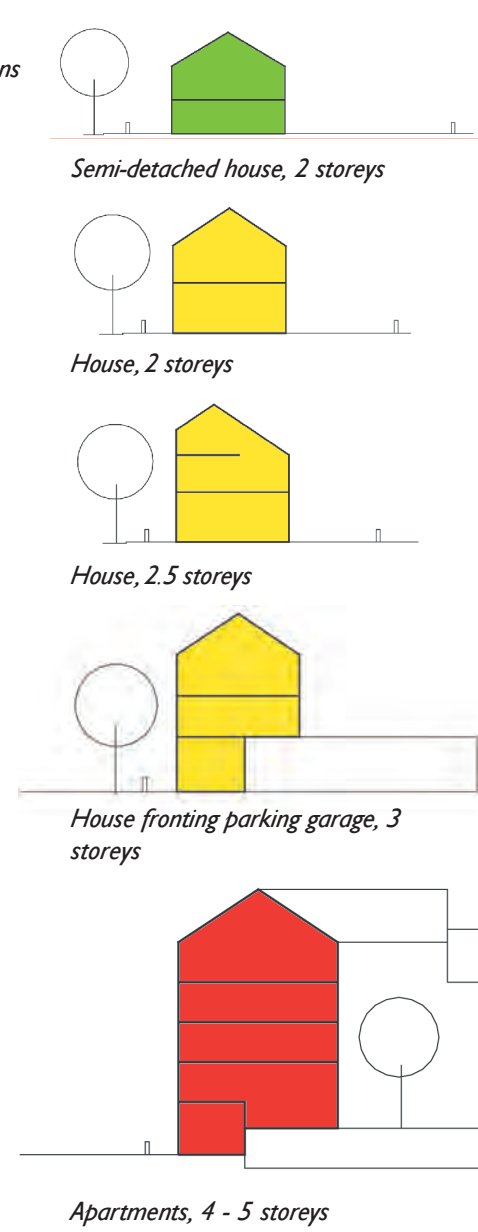
As discussed above (1.2.4. - Sustainability), flexibility is a key factor in ensuring the long-term sustainability of the new community that will inhabit Stapolin Village. It is embodied in the masterplan in terms of distribution and mix of uses; construction and planning of units; and typological variety. The distribution of functions is discussed below. Building construction and planning must allow for easy conversion, subject to planning permission, of ground floor units in certain areas from residential to retail or other uses, especially along the main distributor streets around the commercial node, and around primary urban public spaces. Construction must also allow internal apartment layouts to be flexible, so that they can easily be reorganised, and/or combined and expanded.

B. Mixed Use

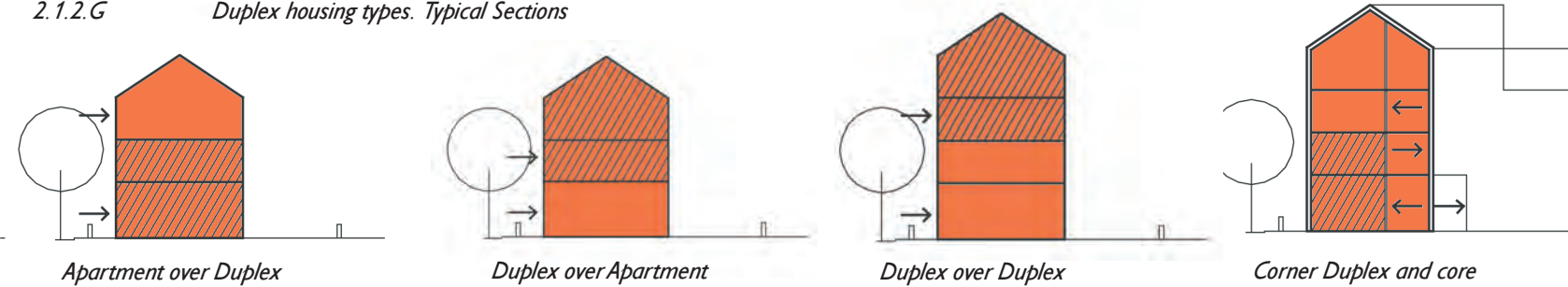
An active, working, urban environment requires a mix of uses to support its residents and provide the complexity essential to its long-term sustainability. The master plan therefore includes commercial and retail uses as well as community facilities. A primary school is located at the heart of the village, and three crèches are distributed through the various character areas. A School Hall will have the dual role of serving both school and community functions, and is therefore placed at the intersection of the two boulevards, looking onto the Common.

Commercial and retail uses will largely be located around the Station Square. However there will be some demand for local facilities, such as pubs, corner shops and the like, in each of the various character areas. Although in principle this mix of uses is positive, these will not be encouraged to proliferate in an ad hoc manner across the site, but will be concentrated in certain areas, such as around local neighbourhood squares and along the main distributor streets, for their own mutual support and to achieve a legible urban structure.

As part of the mixed-use strategy in the areas where future commercial or retail use is contemplated (see Flexibility above), the minimum ceiling height is higher to accommodate potential future change of use.



2.1.2.G Duplex housing types. Typical Sections



Variation of unit type and size avoids the creation of a homogeneous, ghettoised community

C. Residential Typology

In line with the requirements of the Action Plan and Development Plan, the Master Plan avoids the creation of an exclusive or ghettoised community by incorporating a variety of residential types. Apartments, duplex units, and terraced houses are distributed throughout the village. Within this broad division, there will be a range of differently sized unit types available. A small number of larger semi-detached houses are also included in the village. These are all found along the boundary with the existing residential area.

Within this typological variation there is a further breakdown of unit types according to size. Terraced houses are either two or three storeys, offering two, three or four bedroom variations. The range of apartment sizes will vary from one bedroom through to three bedroom penthouses. Duplex units are placed either one over the other, to create four storey buildings, or as a three storey building with a single level apartment either above or below. The size of duplex units varies from two to three bedrooms.

Semi-detached houses are two storeys in height, three to four bedrooms in size and will be designed to allow for flexibility for attic conversion.

As well as variation across the village, unit types are varied around the courtyard block, to encourage social heterogeneity within the semi-private realm of the courtyards.



An urban environment requires a certain minimum density to support its various functions and services

2.1.3.C Long Section indicating height variation (Stapolin Haggard area)



2.1.3. Articulation of volume

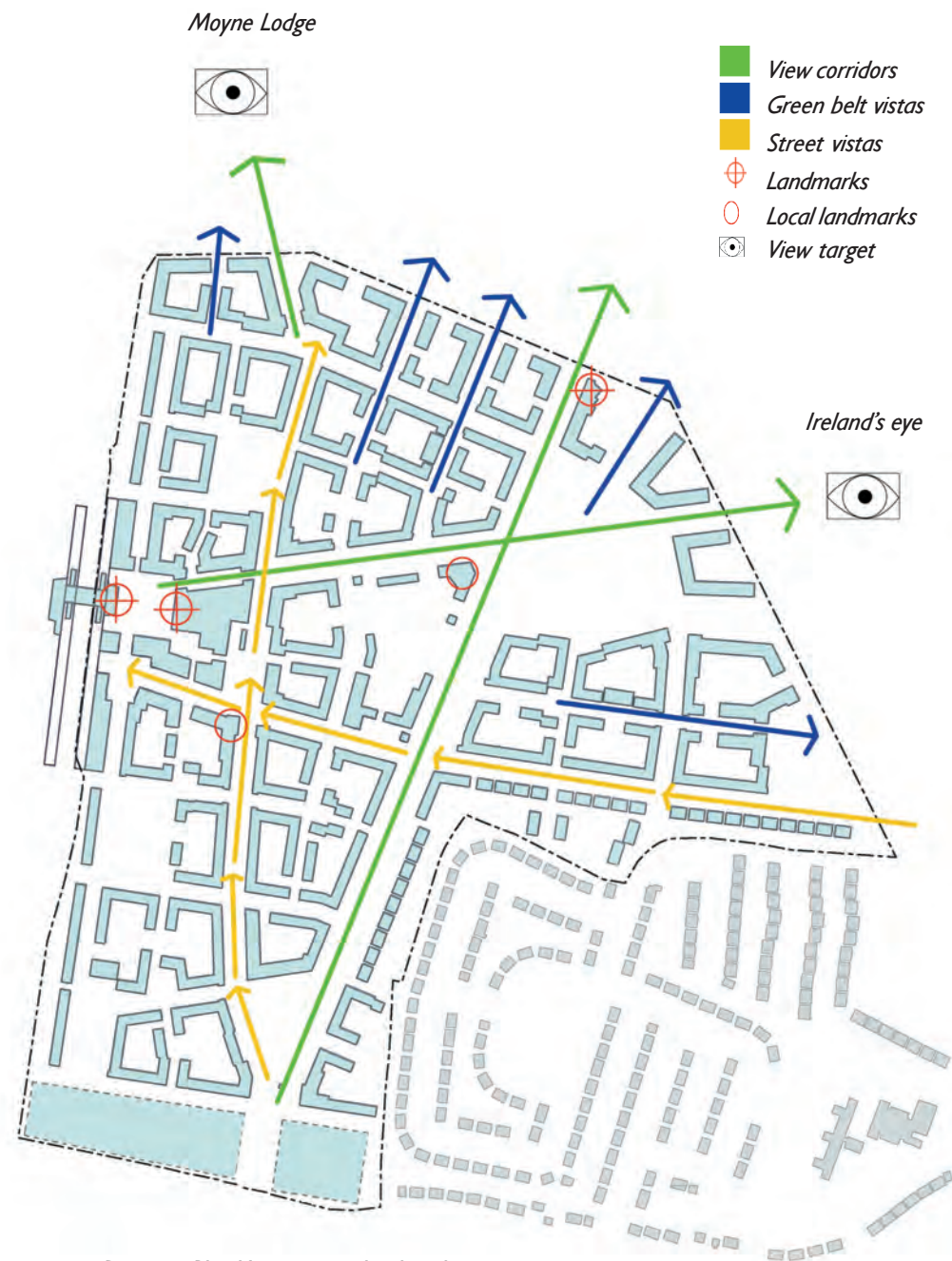
A. Height, Density and Roofline Principles

The building heights and density of development across the site are shaped by three considerations; the Action Plan; climatic factors; and achieving variation. The Action Plan sets out the general principles of increased height and density at the station node and green belt edge falling to low height and density where the site borders existing development. The apartment buildings running along the green belt edge will be generally 5 storeys in height, possibly higher at key locations while the apartments around the Station Square will generally be 4 to 5 storeys.

The distribution of building volume around individual blocks needs to take into account local climate to optimise comfort of both inside and outside spaces, and to facilitate environmental sustainability. The principal factors are the sun and wind. In winter intermittent winds blow off the sea from the north-east. Positioning the highest buildings to the north along the green belt edge will to a certain extent deflect the wind over the village, shielding buildings and spaces, and maximising solar penetration on the southern aspect. This height gradient should also be reflected in individual courtyard blocks, with higher buildings generally to the north, and lower to the south. As well as the height gradient the building roofline should be broken up to help dissipate the wind as it passes over the village.

A central requirement of the Action Plan is that the new development should be fundamentally urban. This requires a certain minimum density in order to achieve critical mass for the support of various functions and services integral to an urban environment (retail, commercial, community & public). At the local level there is also a certain minimum density required to facilitate casual social interaction, and the consequent formation of a network of relationships inherent to a sense of community. To encourage the heterogeneity of population essential to a successful urban environment, density is varied across the site to accommodate different housing types. In addition, density is varied according to space type and function. In principle the local squares form clusters of higher density within the network of mews and lanes.

Glimpses of the **green belt** from various points maintain the relationship between village and countryside.



2.1.3.D Diagram Plan. Views, vistas, landmarks



2.1.3.E The view of Moynes Lodge



2.1.3.F The view of Ireland's eye

The density gradient across the site naturally corresponds to the height gradient, with the addition that minimum and maximum building heights (by floor) are established for all areas of the Master Plan. No building on the site should be lower than two stories. Minimum and Maximum heights are therefore established for each part of the village, and are illustrated in Part 3.

To create a lively roofline and façade, the Master Plan encourages as much variation of storey heights, within the stipulated framework, as possible.

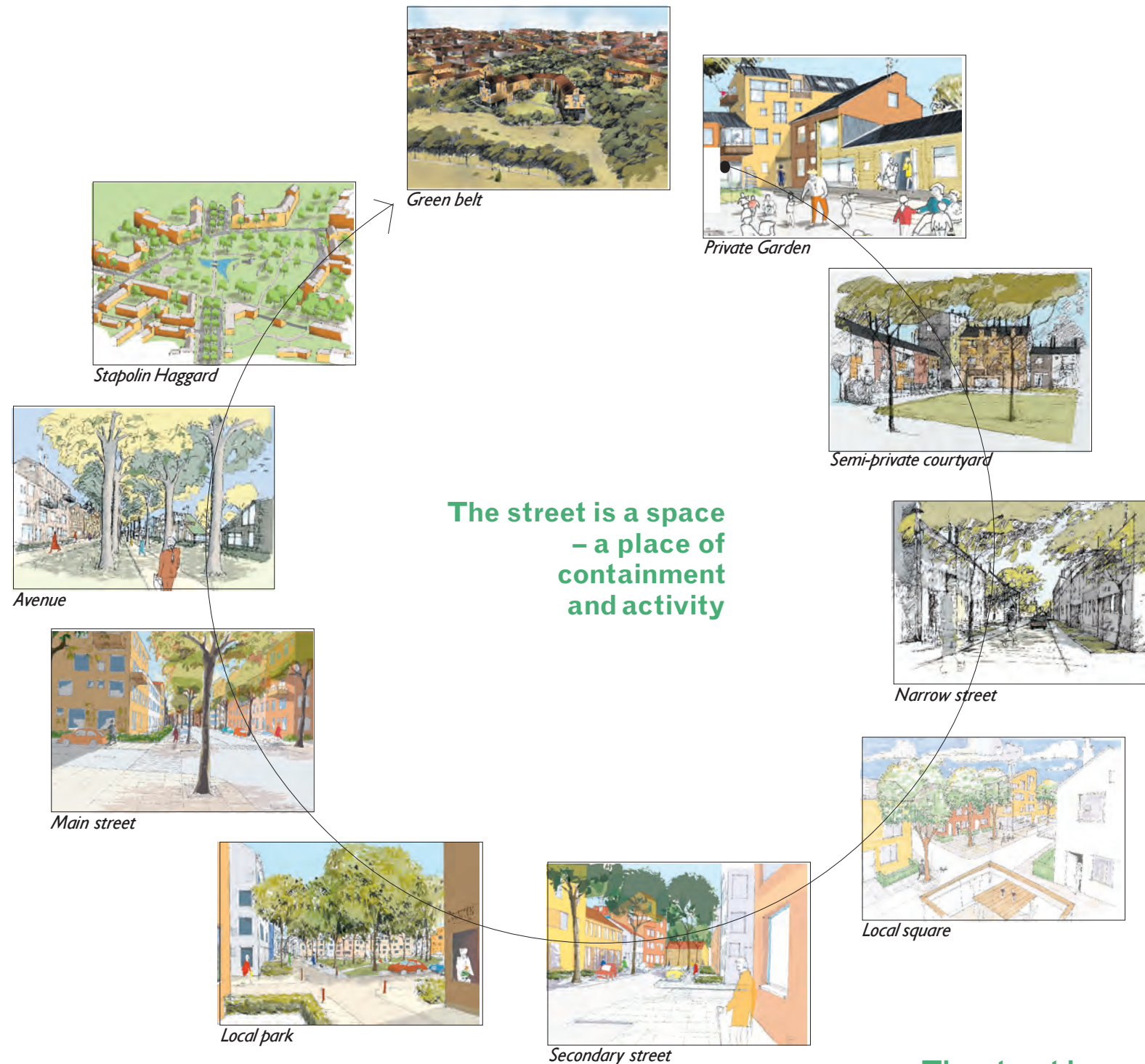
B. Landmarks, Views, Vistas and Focal Points

These elements add interest and variation to the urban structure, creating local identity and enabling area legibility. The Master Plan has been designed to take advantage of and enhance the exceptional views that exist from the site. The main axis through the site, the boulevards, frame views of the green belt, extending right through the site to the two main points of arrival. From the station and Station Square, Ireland's Eye is defined and framed by Ireland's Eye Way. Shorter views and glimpses of the green belt are available from various points in the village, so that the relationship between village and green belt is maintained.

The main streets through the site are curved, breaking up their length and creating shorter vistas to focal points as indicated on the diagram. Buildings at these points should acknowledge the prominence of their position. They will be slightly higher than their neighbours, and have specific corner treatment. Secondary Streets through the character areas meander or are offset, creating shorter, more intimate vistas. Narrow streets are generally only a block in length, ending in T-junctions, so have very short, intimate vistas.

The buildings at Stapolin Haggard act as the community and village centre and are located at prominent positions within the Masterplan, and act as local village landmarks. The Station Square and surrounding buildings are a focal point for the surrounding area, appropriate to its position as the primary node.

Most public space is **informal**, consisting of the village streets.



2.1.4.A Sequence of Spatial Structure

2.1.4. Spatial Relationships

There is a hierarchy of space throughout the village, from private to public. All units have some outdoor private space, either a balcony/terrace in the case of apartments and upper duplex units or a private garden in the case of houses and ground floor duplex units.

Most units have access to semi-private space in the courtyards at the centre of residential blocks. Formal public space is provided for all in the village parks and squares, as well as informally in the street network, as discussed below.

A. Public Space – Streets and Squares

1. SPATIAL PRINCIPLES

The structure of the village masterplan is shaped around the making of public space, i.e. space for public interaction. Although there are several formal public spaces (the village common, parks and squares), most public space is rather less formal, and consists of the village's streets. There is a hierarchical range of streets, each designed according to the core principle that the street is a space – a place of containment and activity, rather than simply a movement and access route. Within this street network are several small local squares, articulated as extensions of the street space.

The street hierarchy relates to the level of penetration of the street, and therefore its length, and the level of movement activity expected on it. The scale and character of each street, its width, and the height of buildings along it, relate to this hierarchy. What remains constant through all the streets, is that the buildings shape the street. The street becomes a room with the buildings alongside as its walls. Building form is as important in shaping the space around it as the space inside, especially in an urban environment. The buildings shape the street space in such a way as to frame views, establish routes and directions, and to emphasise the spatial and functional hierarchy.



2.1.4.B Section indicating height to width relationship across streets and courtyards



Entries to buildings should “address the street”

2.1.4.C Perspective indicating building edges & entries, and overlooking by windows

II. HEIGHT TO WIDTH RELATIONSHIP

There is a subtle and careful relationship between the function of a street, its length and width, and the height of the buildings that define it. The ratio of street width to height remains relatively constant throughout the street hierarchy, so that the more public the street, the longer and wider it will be, and the higher can be the defining buildings along its length. Buildings should not be too high relative to the width of the described street, so as not to dominate, likewise if buildings are too low relative to the street they will fail to properly enclose or define it. Around the local squares buildings are slightly higher, so as to emphasise the proportions and the importance of the space as a local focus.

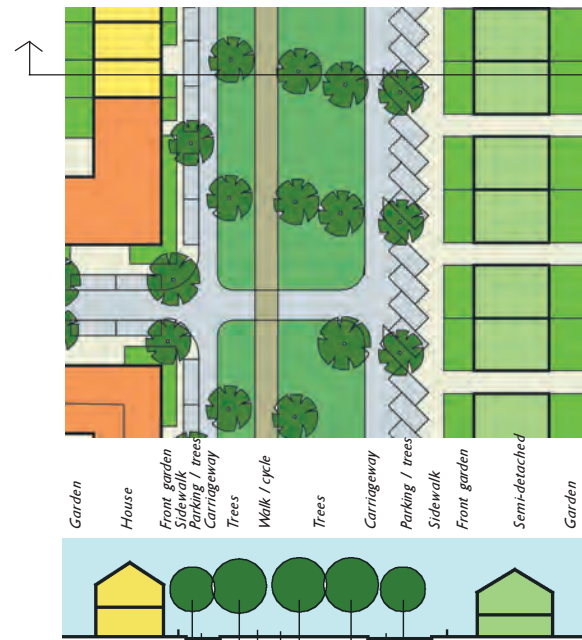
III. OVERLOOKING ASPECTS & FUNCTIONAL RELATIONSHIPS

A relatively dense urban environment, with tall buildings, can result in lack of privacy for residents. Privacy is provided by appropriate design of private and semi-private areas at the rear of buildings to ensure that residents do not feel exposed (See Courtyards below). However, to the front of buildings the reverse is true. Public streets and spaces benefit from being overlooked, both in terms of a sense of security for people passing through them, and in terms of enlivening those spaces. The more frequently used rooms (such as living and dining) of a residential unit should therefore generally be located at the front of the building, with private rooms behind. Likewise any commercial or retail uses should be located on the major streets, and to a lesser extent on the local squares.

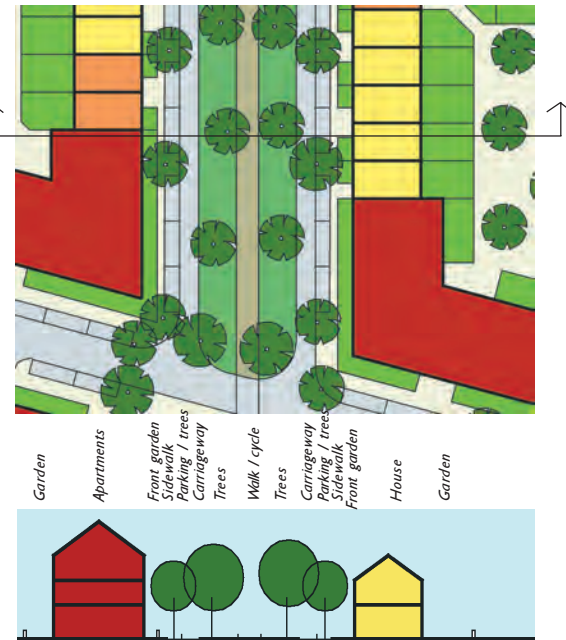
IV. BUILDING EDGES AND ENTRIES

The edges of any building determine the form and structure of the space on which it fronts. The streets function as the public space of the village. The façade of any building orientated towards any part of a street should be considered as a ‘front’. As such it should have a firm edge, especially at ground level. Entries to the building should ‘address the street’, i.e. they should be visible and accessible, with a direct relationship between the entrance and the street, and not tucked behind screens or subsidiary spaces. Entries should also reflect the nature of the building’s function, so that there is a difference, for example, between an entrance to a residence and one that is into commercial premises.

The Boulevards are the principal pedestrian routes



2.1.4.D Boulevard 1, plan & section



2.1.4.E Boulevard 2, plan & section



2.1.4.F Boulevard, perspective

V. STREET TYPES AND HIERARCHY

(See 2.2.4 Streets and Traffic for a detailed layout diagram of street hierarchy)

The various streets of the village perform different roles in terms of village structure and legibility, their spatial function and accessibility.

The two **Boulevards** (Ireland's Eye and Stapolin Avenues) act as the main structuring axis through the site, as well as being the principal pedestrian routes. As they also define the village structure they are broad, straight, tree-lined avenues.

The two **main streets** (Racecourse Way and Mayne Street), along with the curved way around the northern area of the site (Stapolin Way), are the primary ways of access and movement distribution through the site. These are curved along their length both to reduce vehicular movement speed, and to subordinate them to the Boulevards. They are reasonably wide streets with broad tree-lined pavements.

Main streets give primary access



2.1.4.G Main street 1, plan & section



2.1.4.H Mayne Street, perspective



Narrow streets are outside extensions to the living space



2.1.4.J Secondary street, plan & section



2.1.4.K Secondary street, perspective



2.1.4.L Narrow street, plan & section

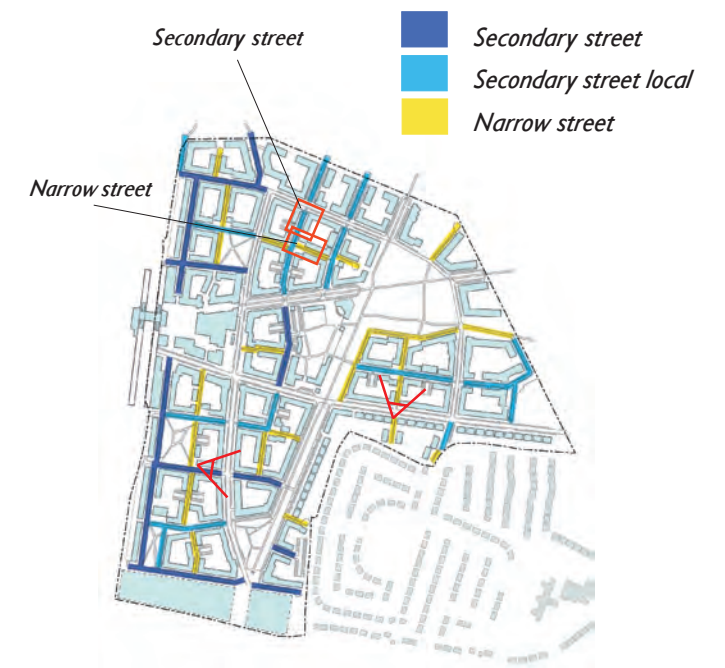


2.1.4.M Narrow street, perspective

Secondary streets are the movement distributors through each character area. They provide links from one place to another, without being part of a longer route, and will therefore be quieter with a more residential feel.

Secondary streets are sub-divided into two types; Secondary Access and Secondary Local. The latter have pinch-points and raised tables where they join other secondary or main streets, to assist the definition of local neighbourhoods

The **Narrow streets** are short streets for accessing particular houses. No parking is allowed on these streets, and there is no surface differentiation between roadway and pavement. The streets are fundamentally outside extensions to the living spaces, with the secondary function of allowing necessary vehicular access to the houses.



Key plan

Local parks and squares open up the street pattern ...

... enhancing the pedestrian environment ...



2.1.4.N Local square - perspective



2.1.4.O Local square - plan



2.1.4.P Local Park - perspective



2.1.4.Q Local Park - plan

VI LOCAL SQUARES

These areas provide a neighbourhood focus, and relieve the grid of the street network. They are articulated as paved urban spaces. As extensions to the street and pavement space, they will be furnished with street furniture (such as benches) and planting. Buildings around these spaces will be higher than on the immediately neighbouring streets, and their entrances concentrated on the local square.

VII LOCAL PARKS

The local parks function as green residential squares, and are arranged on a green pedestrian priority route through the site. Each is landscaped in a distinctive way, to enhance local identity.

Both of the two public space types described here open up the street pattern, allowing breaks and pauses in the street network, enhancing the pedestrian environment and increasing permeability

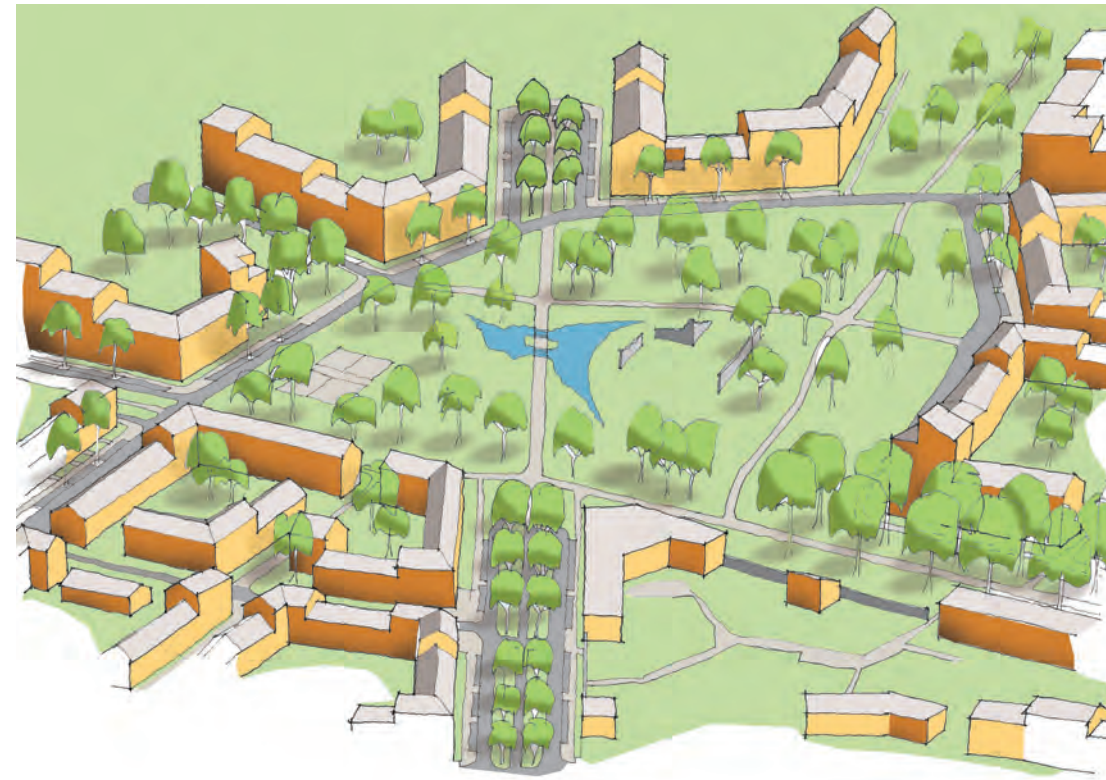


Key plan

... and increasing permeability



2.1.4.R Stapolin Haggard plan, landscape, memory traces



2.1.4.S Perspective park edge / buildings

The green heart of the village ...



Key plan

B. Public Space – Special Areas

I. STAPOLIN HAGGARD (VILLAGE COMMON)

As the central open space, this is the green heart of the village. It also has strong links to the open green belt space, but unlike the green belt this is a domesticated space. It also contains traces (memories) of the landscape prior to the development of the village, including the ruined stone walls of a farm compound. Although domesticated, it is an irregular space, unlike the more formal Station Square described below. Its form is an indication of the structure of the landscape that existed before the village development, with its edges reflecting old field boundaries and farm tracks.

There are two edge conditions to the Haggard. On the south and west sides are urban residential blocks facing access streets. These are hard, regular edges with building fronts and entries facing the Common, and relatively high facades of three to four storeys. The north and west edges are defined by Stapolin Way. These edges are more open, with green links through to the green belt between apartment blocks. Although more open, the edges will have higher buildings, with the apartment blocks being generally five storeys. Main entrances to these buildings should be on Stapolin Way facing the Common and off the side streets to Stapolin way, towards the park.

As in the public street spaces described above, the Haggard should be well overlooked by the surrounding buildings, which should not only be relatively high, but also have actively used rooms and windows facing onto the Haggard. This space will be actively used by local residents walking dogs, playing ball games or simply lazing in the sun. With its relationship to the school and its location at the intersection of the two boulevards, Stapolin Haggard is central to the overall identity of the village.

The village's retail and commercial centre



2.1.4T Perspective, station square

an intimate space -
the civic focus of the village



2.1.4U Urban section, station square



2.1.4V Detailed urban plan, Station square

II. STATION SQUARE AND PRECINCT

This is the retail and commercial centre of the village. It is a lively, active public space, with defined edges around a hard surface. The scale of the space is relatively intimate, with a high ratio of building height to the width of the space. The space is an outdoor room, but with a variable roofline around the three built edges, ranging generally from three to five storeys. This variation will increase the intimacy of this space. This will be used by local residents for their daily shopping, but will also act as the commercial focus of the village.

The fourth edge of the space is to the station and railway. This edge needs to shelter the space from the noise of passing trains, without cutting off the space from the station. The edge is permeable, and provides access and views between the square and platforms. On the Stapolin side of the space is a stage, where concerts and outdoor theatre are performed.

These activities will add to the square's liveliness, with its businesses, cafe's, restaurants and shops creating active ground floor frontage. Entries to offices and flats on the upper floors of the surrounding buildings will open onto the square, giving these an important address within the village, and perhaps within greater Dublin. The mix of uses on the upper floors around the square, and the range of functions within it, will ensure optimum night and day activity in the space.

A pedestrian way along the line of Ireland's Eye Avenue links Station Square to Mayne Street. A second pedestrian way links the Square to Mayne Square, the central bus terminus and taxi drop-off point. These links and others to the north and south, as well as the presence of the station, ensure the square is well connected to the wider village fabric.



Key plan



Grange Square is located at the southern gateway to the site

2.1.4.W Plan, Grange Square



2.1.4.X Perspective, Grange Square

III. GRANGE SQUARE

Grange Square lies at the intersection of Mayne Road and Stapolin Avenue – the two principal north-south routes through the site. The first is a main vehicular access and the latter a pedestrian priority axis through the site. It sits at the south end of these and is the first point of arrival for residents or visitors entering the village from Grange Road. Its southern side is marked by two 'gateway' buildings, with a paved space in between. South of these buildings is a commercial and mixed-use buffer strip to Grange Road (see Perimeter Areas below), with a road connection through a landscaped corridor to the road.

Although located at the main gateway to the site, this square is largely residential. However, it is relatively grand in scale, with higher buildings (four to five storeys) than the other local parks and squares. As at other public spaces, buildings around the square will have their main facades and entrance onto the Square. Despite being a residential square the corner buildings have retail or commercial functions.



Key plan



2.1.4.Y Detailed plan, School

It plays a crucial role in defining the space around it

The school functions both as a place of education and as a community facility



2.1.4.Z Perspective, school from Ireland's eye Avenue

IV. CIVIC BUILDING/SCHOOL

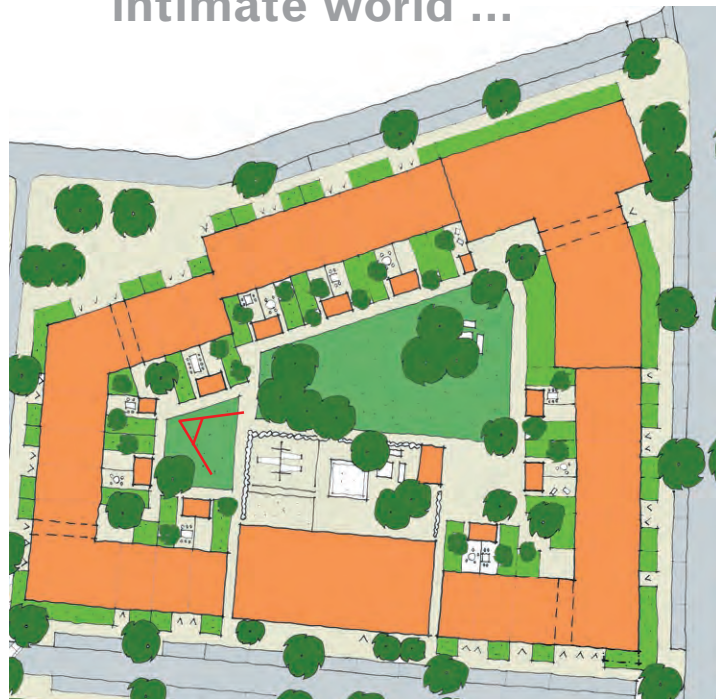
The Civic Buildings are located in a large block within the centre of the village. The School performs a crucial role in the life of the village residents, functioning not only as a place of education, but also for community facilities. Likewise it performs a crucial role within the Master Plan in terms of structuring the space around it, and the spaces within it. The Master Plan gives an indicative layout for the buildings, in which the School and other civic buildings are located around the edges of the block with a central space. This is for two reasons. Firstly the definition of the street space around the block, and secondly to create an intimate central open space for the use of the school children.

Due to the importance of this space a specific design brief will be produced to define uses, architecture and layout.



Key plan

The private realm – an intimate world ...



2.1.4.AA Courtyard plan



2.1.4.AB Public, semi-public, private areas



2.1.4.AC Perspective, courtyard internal view, creche in foreground



2.1.4.AD Perspective, courtyard block

C. The Private Realm (Courtyard Blocks)

Whereas streets constitute the public realm of the village, the urban block and its enclosed courtyard structure the private realm. This is the intimate world of the local resident, not accessible to outsiders, a secure and private place, containing both private rear gardens and semi-private open space. There are two courtyard types, both conforming to the same basic principles, in terms of their spatial relationships:

- raised courtyard over single storey parking podium with higher buildings around the space;
- surface courtyard with lower buildings.

I. ACCESS

The space enclosed within the block, either private gardens or communal open space, is for the use of those who live in the buildings around it, and not for other residents or visitors. It is quite different to the public space of the streets and boulevards. Entry to these spaces is therefore largely from the surrounding buildings. Where there is direct access from the street, this should involve a sense of transition, or gateway, from one space to the next.

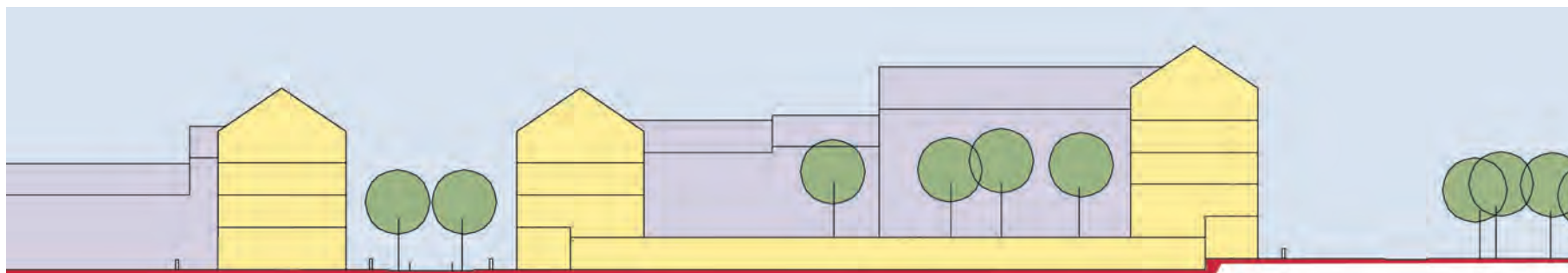
II. BUILDING EDGES AND ENTRIES

In contrast to the face a building presents to the public street, its inner façade to the courtyard should be softer and reflect the more private nature of the space contained. Duplex and apartment units at ground level should have access to private gardens, around communal open space. Units above have private balconies. Balconies and terraces will help to articulate and break up the inner façade.

... providing enclosure – a contained and secure space



2.1.4.AE Detailed plan. Courtyard blocks



2.1.4.AF Detailed section. Courtyard block

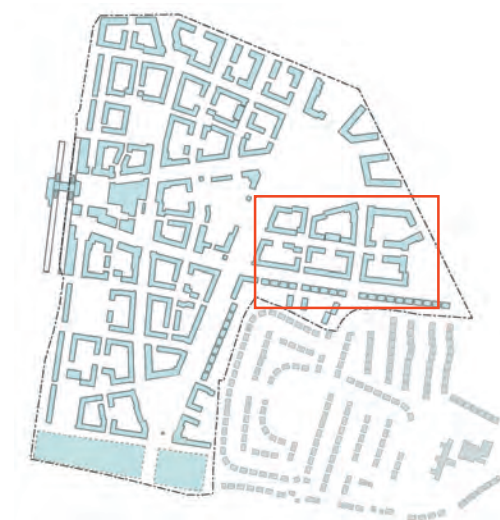
III. CRÈCHE FACILITIES
 Kindergarten/Crèches are provided within the perimeter of some of the courtyards (see plan 2.1.4.AE) An indicative size of built volume and playground area has been provided. Final position and size to be defined in a later design stage.

IV. HEIGHT TO WIDTH RELATIONSHIP
 The space within the courtyards is more generous than that of the streets, both due to their different function and to the enclosure on four sides, whereas street-space is always open-ended and directional.

V. OVERLOOKING ASPECTS
 Maintaining privacy is a critical aspect of grouping residential units around a shared open space. As these spaces are by definition more secure than the street space, the requirement for the space to be overlooked is not as strong. Residents should have a sense of privacy in their own balconies and gardens.

VI. PRIVATE VERSUS COMMUNAL SPACE
 The difference between private and communal space within the courtyard should be clearly delineated, through surface treatment, screening, minor level changes etc. It is equally important that the private spaces are not completely cut off from the communal space, but the two together form a cohesive overall space.

VII. SECURITY
 Where the courtyard spaces have direct access off the street, such as in those with internal parking areas, some form of security will be needed, preventing access to those other than the residents of the space.



Key plan

Grange Road is a main traffic artery and noise and pollution generator



2.1.4.AG Perspective - Grange road edge

... a commercial/mixed-use buffer shields the village

D. Perimeter Areas, Green Belt and Railway

I. GRANGE ROAD EDGE

Grange Road is a major east - west thoroughfare, through the north Dublin periphery. It is the main access point to the village and as a main traffic artery is a noise and pollution generator. A buffer strip is therefore planned along this edge. In the longer term it is envisaged that this entire strip will contain a series of commercial and mixed-use buildings screening the residential environment of the village but allowing views into it especially at the entrance from Grange Road.

These buildings will utilise their location on the traffic artery by housing uses such as car showrooms, DIY warehouses and the like. Commercial entries and public faces will be to the Grange Road, with less formal facades and service access on the north side. However, their north sides will need to respond to the residential nature of the streets on this side. These buildings will reach a maximum height of six (6) metres at the residential edge (northern boundary) and a maximum of nine (9) metres at the Grange Road and railway edge.

II. EXISTING RESIDENTIAL EDGE

The existing residential development turns its back on the current open space around it. The two storey dwellings proposed will have back gardens running up to hedgerows, existing walls, new concrete post and panel walls or other new boundary treatments. The semis will face onto Stapolin Avenue and Racecourse Way, defining the space of these streets and overlooking them. Their entrances will mostly be onto these streets. The two storey semis are intended to create a seamless transition between new and existing houses, protecting the existing development from disruption by the new, and knitting together the two. The design of the residential edge will require specific architectural and landscape treatment and will have to be executed in a sensitive manner.

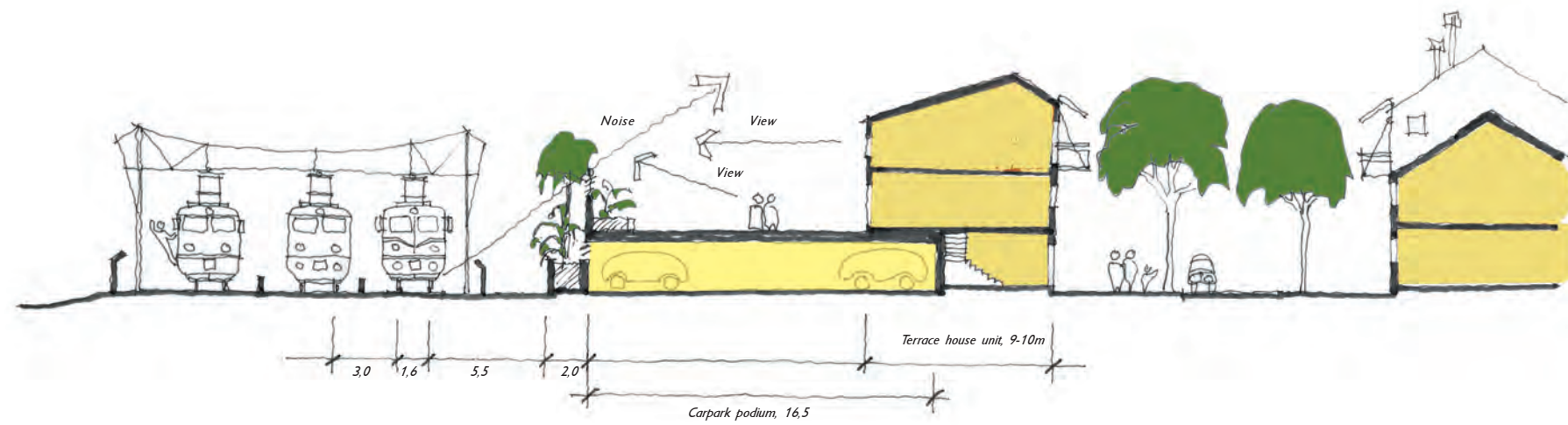


The semis create a seamless transition between new and existing, knitting the two together.



2.1.4.AH Plan - Existing residential edge

Key plan



2.1.4.AJ Section - Railway edge



Key plan



2.1.4.AK Perspective - Green Belt Edge

Optimising green belt access through permeability, while maintaining a defined urban edge.

III. RAILWAY EDGE

To screen the village from the railway line, a series of side-accessed, covered parking garages runs along its length. On their street frontages rows of terraced houses will ensure that the garages do not present a blank face to the street. The units are single aspect at ground floor level, with entries facing the street. Living areas above are dual aspect, with rear terraces over the parking garages. These terraces are screened from the railway by solid walls, a minimum 1.8 metres above the roof height of the garages below.

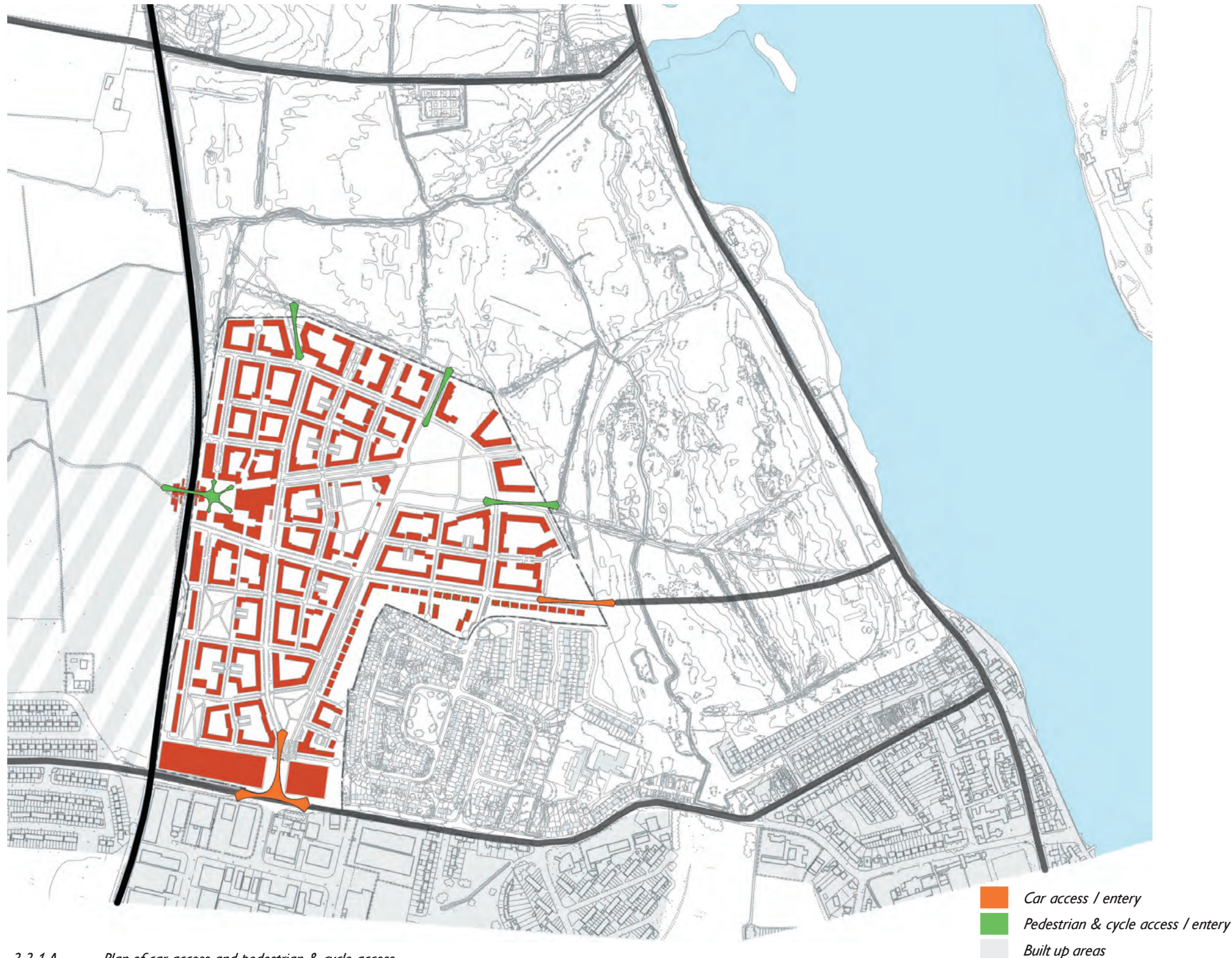
IV. GREEN BELT EDGE

Treatment of this edge seeks to optimise access to the parkland, through permeability of the edge, and through integration of green belt and village while maintaining a defined urban edge. Buildings are therefore high around the edge, being predominantly 5 storey apartment buildings. All of these will have their principal entrances and main facades to the streets of the village. Less formal facades will be provided facing internal courtyards opening onto the parkland. The height of the buildings and the provision of terraces and balconies will ensure that the parkland space near the village is well overlooked. However, at the ground floor level the courtyard gardens are screened from the parkland space by hedgerows and a ha-ha. (Landscape Strategies below).

2.2

TRANSPORT & CONNECTIONS

A transport strategy is about local convenience, for all modes



2.2.1. A Transport Strategy

The key aims of a transport strategy for the Baldoye development area are:

- to provide access to, from and across the development;
- to connect the development with neighbouring areas, both new and existing;
- to service residential, retail and commercial units on the site;
- and to provide for movement and access according to principles of sustainability.

Ultimately a transport strategy for the area should be about the convenience of local residents, but this does not mean only those in cars. It needs to provide also for the requirements of public transport users, pedestrians, cyclists and users of open space.

2.2.1.A Plan of car access and pedestrian & cycle access

“One of the main aims of this development is to reclaim the urban environment from the car”

2.2.2.A Detailed plan pedestrian & cycle paths



- Pedestrian & cycle priority / only
- Important connections, pedestrian & cycle priority
- Green public areas, pedestrian & cycle priority / only



2.2.2.B perspective boulevard



2.2.2.C perspective local square

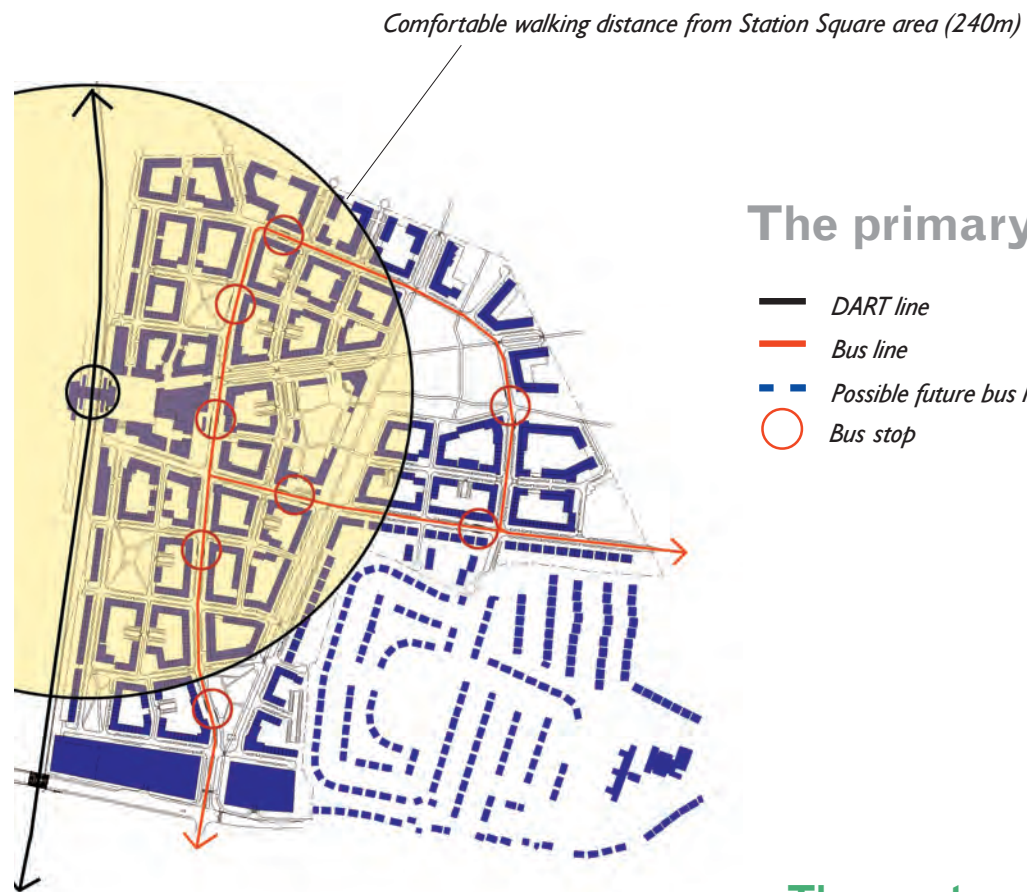
Streets are designed around the pedestrian

2.2.2. Walking and Cycling

Most of our urban environments are dominated by the car. One of the main aims of this development is to reclaim the urban environment from the car, both by reducing the need for vehicle trips and by designing the streets as public spaces, not simply as vehicular movement routes. The overall need for trips is reduced through the design of the village as a high density mixed-use environment (as discussed in Part 2.1 above). By designing the street network as public space, the Masterplan not only creates better places for people to use for recreation and their everyday needs, but also encourages the use of more sustainable transport modes, such as walking and cycling.

The village has several pedestrian only public spaces. Stapolin Haggard and Station Square, and it's main axis, the two boulevards, are principally pedestrian routes. In addition, main streets are designed to have broad pavements, with car-parking and planting screening pedestrians from traffic. Within the character areas, streets are designed around the pedestrian. The narrow streets have a shared surface for all transport modes and no parking provision. The entire street width in effect belongs to the cyclist and pedestrian, with the car permitted only as 'guest'.

Cycling is encouraged within the development through the creation of a cycle network. In most areas this is not formalised with segregated cycle lanes, but rather through the reduction of car traffic within local neighbourhoods, or character areas, and by calming where necessary on main streets, to increase cycle and pedestrian comfort and safety. Dedicated cycle routes through and around the green belt link to the cycle network in the village. Cycle hoops should be provided at key points, such as the station and Station Square, Stapolin Haggard, local squares and along the main streets, to facilitate cycle security.



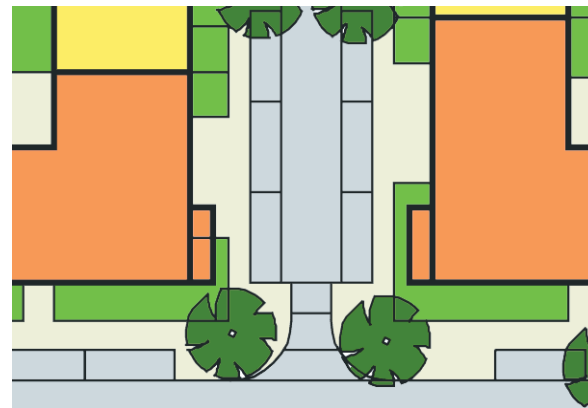
2.2.3.A Plan - public transport

The primary consideration ... is the safety and security of residents.

The master-plan design minimises the level of local traffic



2.2.4.A Key plan - pinch points



2.2.4.B Detailed plan "pinch points"



2.2.4.C images: pinch points, raised tables, shared surface and cycle priority

2.2.3. Public transport

The major public transport provision is the extension of the DART line, with a new station to serve the village. The station will have park and ride facilities. Although the bulk of this is to be provided on the North Fringe side, some parking is provided beneath the buildings around Station Square.

Most of the village is within a ten minute walk of the station. Bus services along the main roads (Racecourse Way, Mayne Street and Stapolin Way) will link the village and neighbouring areas to the station. The main bus stop is at Mayne Square, linked to Station Square, at the junction of the two main streets, with other potential bus stops along routes through the village (indicated in the public transport diagram opposite).

2.2.4. Streets and traffic

A. Traffic Calming

The primary consideration of the village transport structure is for the safety and security of residents. There are two aspects to this: high volumes of (or high speed) traffic moving through the village will have obvious negative impacts in terms of safety and environmental quality. However, the overall security of the area is increased where there is a steady flow of vehicles and corresponding passive surveillance of the area. This second aspect is facilitated by optimising linkages within the village, and avoiding the creation of cul-de-sacs.

Overall traffic volume is unlikely to be high. The village is not on any through routes, and the level of local traffic (in any event not very high) is minimised through the Masterplan design, incorporating mixed use and facilitating both public transport and other trip modes. Traffic calming measures are incorporated into the street layout and design. For example, the curved design of the main streets, as well as providing the spatial qualities discussed in 2.1 above, is also intended to reduce vehicle speed. In the narrow streets traffic and speed are controlled through non-segregation of street surface, layout, landscaping and street furniture.

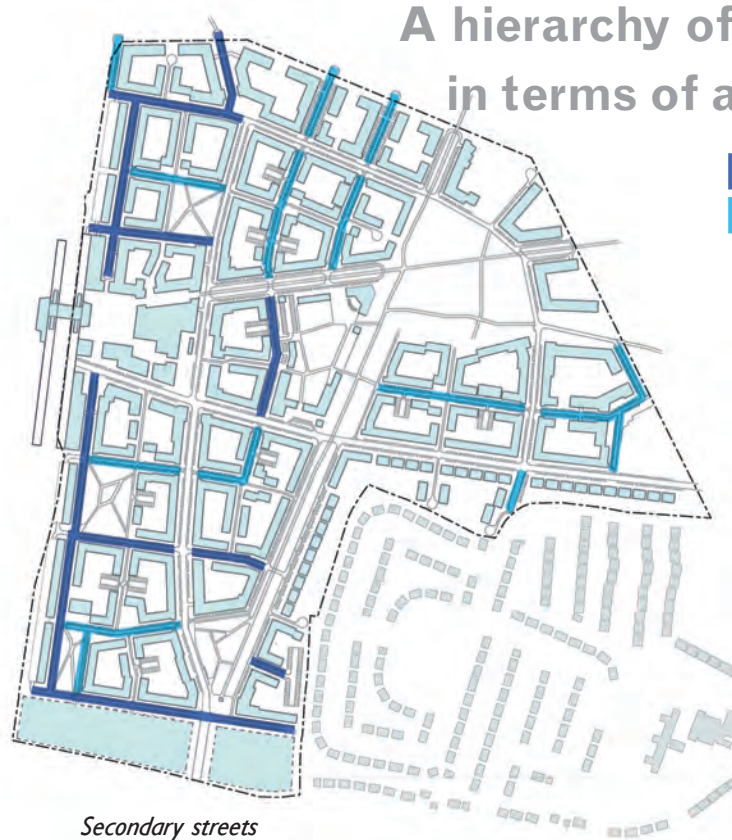
Additional calming measures are used to define environmental areas, and to reinforce the street hierarchy described below. Pinch points and raised tables are used to differentiate 'secondary local' streets from 'secondary access' streets, defining the areas they serve as neighbourhoods and pedestrian priority areas.



2.2.4.D Boulevard



2.2.4.E Main street



2.2.4.F Secondary streets

A hierarchy of street functions, in terms of access and traffic

- Secondary street access
- Secondary street local



2.2.4.G Narrow streets

B. Street Hierarchy

There is a clear hierarchy of street functions, in terms of the level of access they provide and the amount of traffic they are designed to carry.

I. BOULEVARDS

The Boulevards are broad, major routes through the village, and in keeping with the aim of the Master Plan to reduce car dominance, are largely pedestrian areas. Parts of the boulevards have no vehicular access. For the remainder, vehicle movement is in segregated lanes either side of a central pedestrian way.

II. MAIN STREETS

Although the intention is that cars do not dominate, car-use is still an important transport mode. This is dealt with through structuring the remaining streets for different levels of car access. The main streets are the most connected streets (i.e. longest and with greatest number of connections off), will carry the highest level of traffic, and are relatively wide.

III. SECONDARY STREETS

These give access through the character areas, but do not generally connect through the site. They are offset and meander more than do main streets. They are narrower than main streets.

IV. NARROW STREETS

These are the least connected streets, not more than two blocks long, and for local access only. As their name suggests these are the narrowest streets. They are treated more as outside rooms than as movement routes, with a shared surface across the street width. They are pedestrian dominated areas. Cars and other vehicles have drop off and emergency access, but parking is generally absent.

2.2.5. Parking and servicing

A. Parking standards

As discussed above, the Stapolin Village development seeks to minimise car use in line with principles of sustainable development. Nevertheless the Masterplan recognises that the car remains the principal mode of travel for many people, and therefore needs to be accommodated within the village. The Fingal County Development Plan requires parking provision of 1 to 2 spaces per unit. The Masterplan has allowed parking spaces at the lower end of this scale, allocating **3900** bays, for **2600** units - a ratio of **1:1.5**.

As many bays as possible have been accommodated on the streets themselves, in so far as this can be done while still maintaining the environment of the street as an outdoor public space. Provision of bays between landscaped sections of the pavement space will in fact contribute to the sense of the street as a space, in that parked cars create a buffer zone between traffic and pedestrians. Where extra parking is needed this is grouped and accommodated in surface parking areas within the courtyards, or in semi-basement podiums underneath courtyards and surrounding buildings. Grouping them in this way is intended to minimise the amount of ground space devoted to storing vehicles, so allowing a greater provision of usable outdoor space.

B. Street parking

The majority of parking spaces are accommodated on the streets. All streets, except Narrow Streets, have some parking, which is provided according to the principle that it forms a part of the landscaped road edge. Bays are arranged in series, separated by trees and landscaped areas. Depending on street width and function, parking is arranged either parallel, diagonal or perpendicular, as indicated in the diagrams opposite.

C. Surface car parks

Additional surface parking is provided in some of the courtyard spaces. Parking in these areas will be dedicated to local residents only, and access controlled. Because these parking areas are a part of the courtyard space, they need to be carefully landscaped and detailed, so that neither the cars nor the parking space disrupt the nature of the courtyard space.

“...allocating 3900 bays, for 2600 units...”



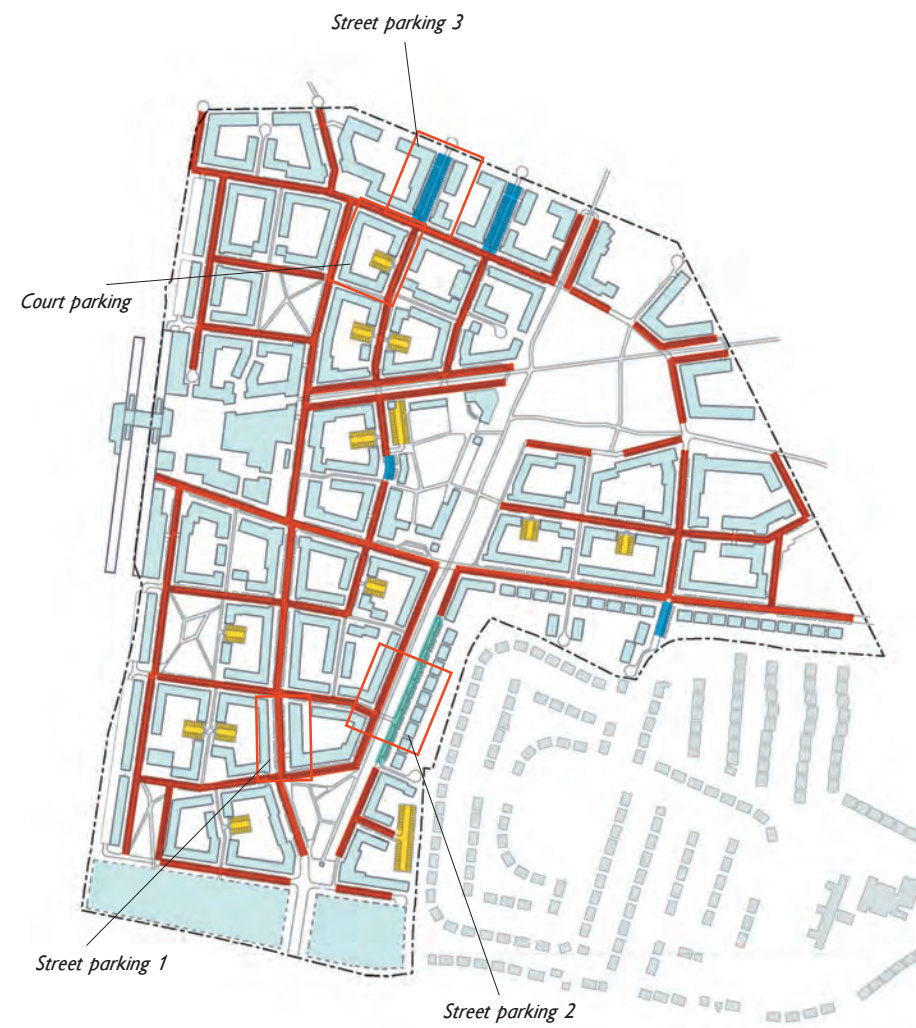
2.2.5.A Street parking 1
- detailed plan

2.2.5.B Street parking 2
- detailed plan



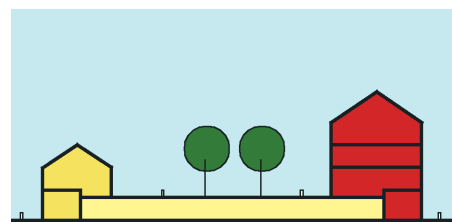
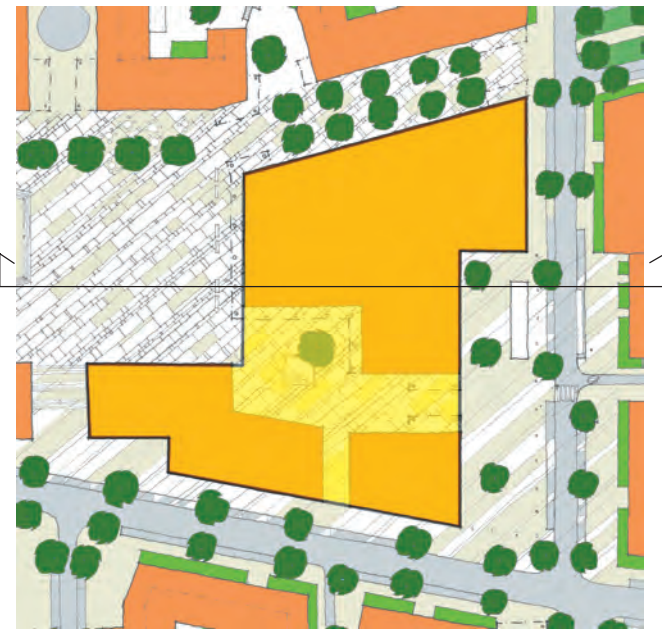
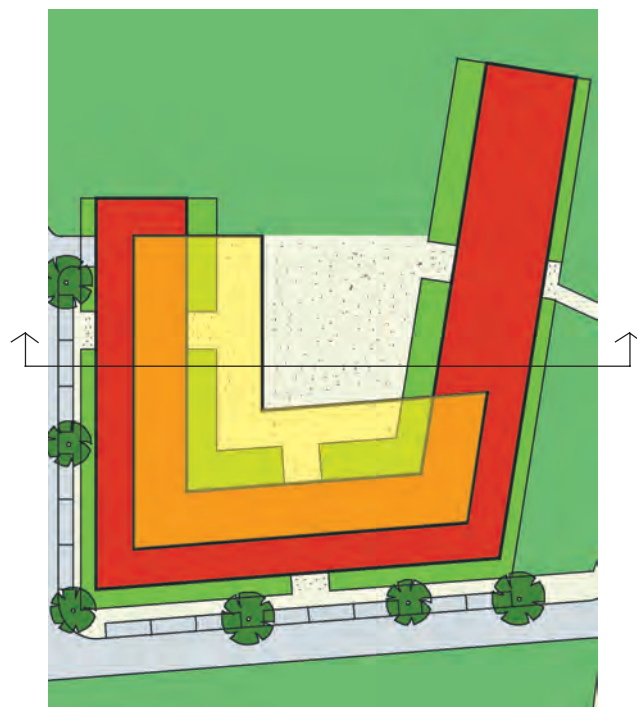
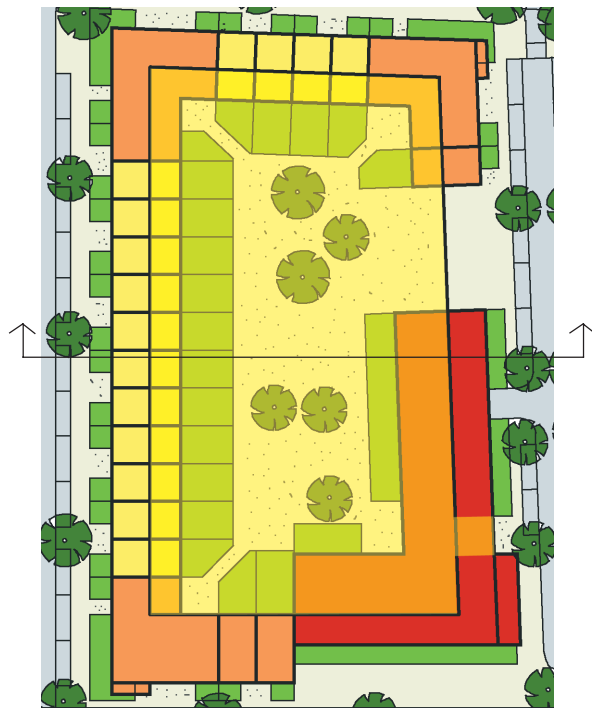
2.2.5.C Street parking 3
- detailed plan

2.2.5.D Courtyard and parking
- detailed plan

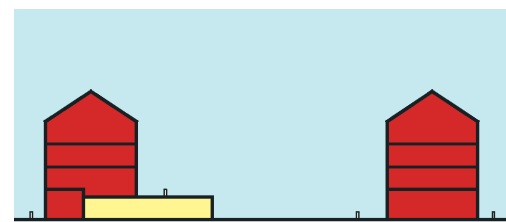


Key plan parking

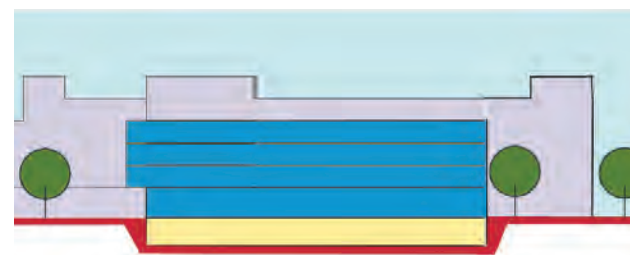
- Street parking 1
- Street parking 2
- Street parking 3
- Court parking



2.2.5.E Courtyard podium parking, detailed plan and section

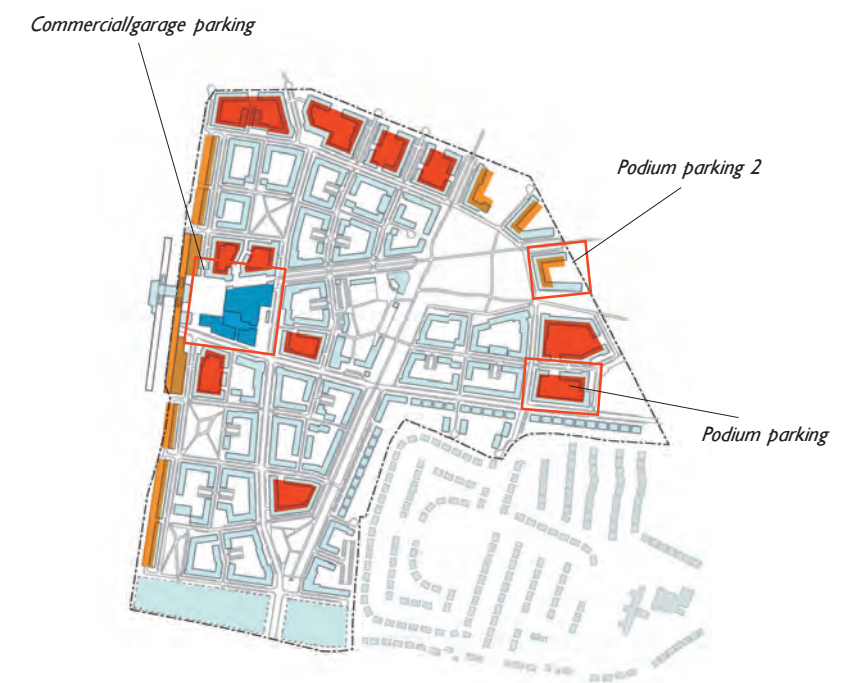


2.2.5.F Podium parking 2, apartment building part podium, detailed plan and section



2.2.5.G Garage, commercial parking, detailed plan and section

- Podium parking
- Podium parking 2
- Commercial/garage parking



Key plan parking

D. Podium parking

Podium parking is covered ground floor parking, and comes in two types:

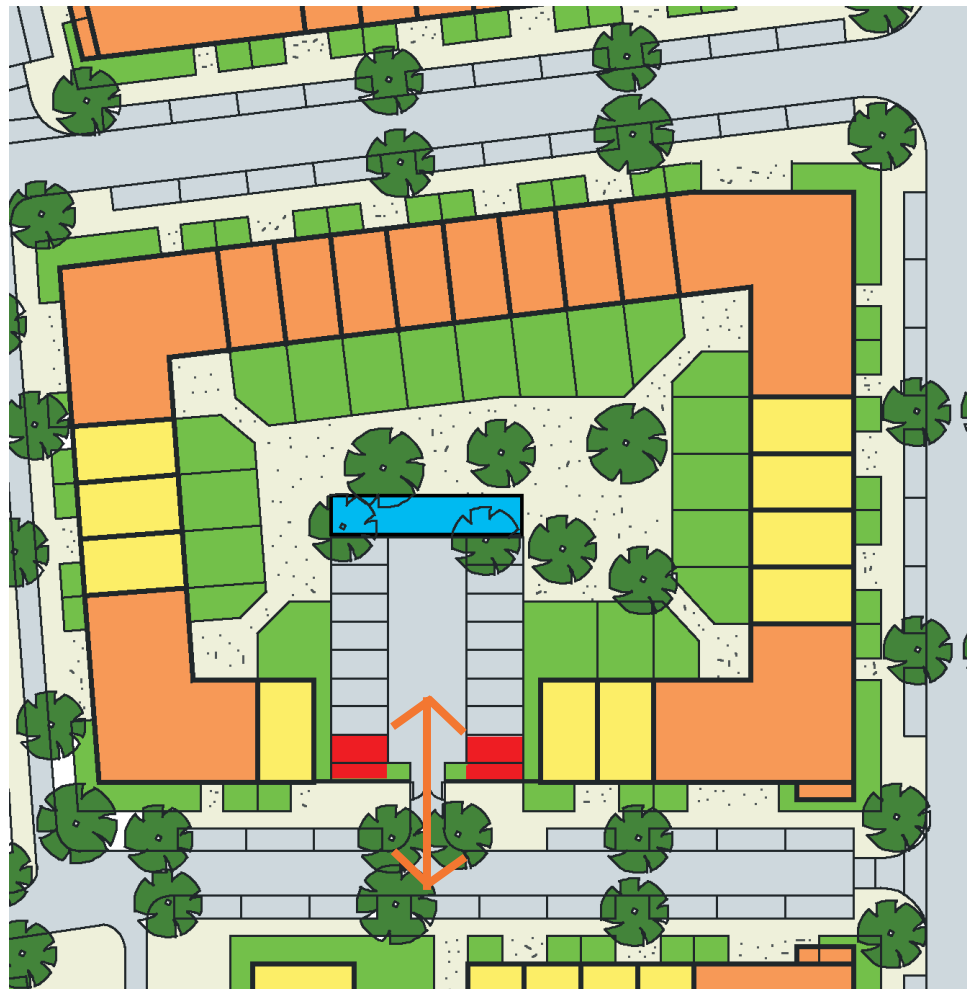
- Podium under entire courtyard space, including parts of the surrounding buildings
- Part podiums behind terraces or under apartment buildings

In each case the buildings wrap around the parking space on the street frontages (except for ventilation and entries) masking the parking from the street and preventing the creation of dead street spaces.

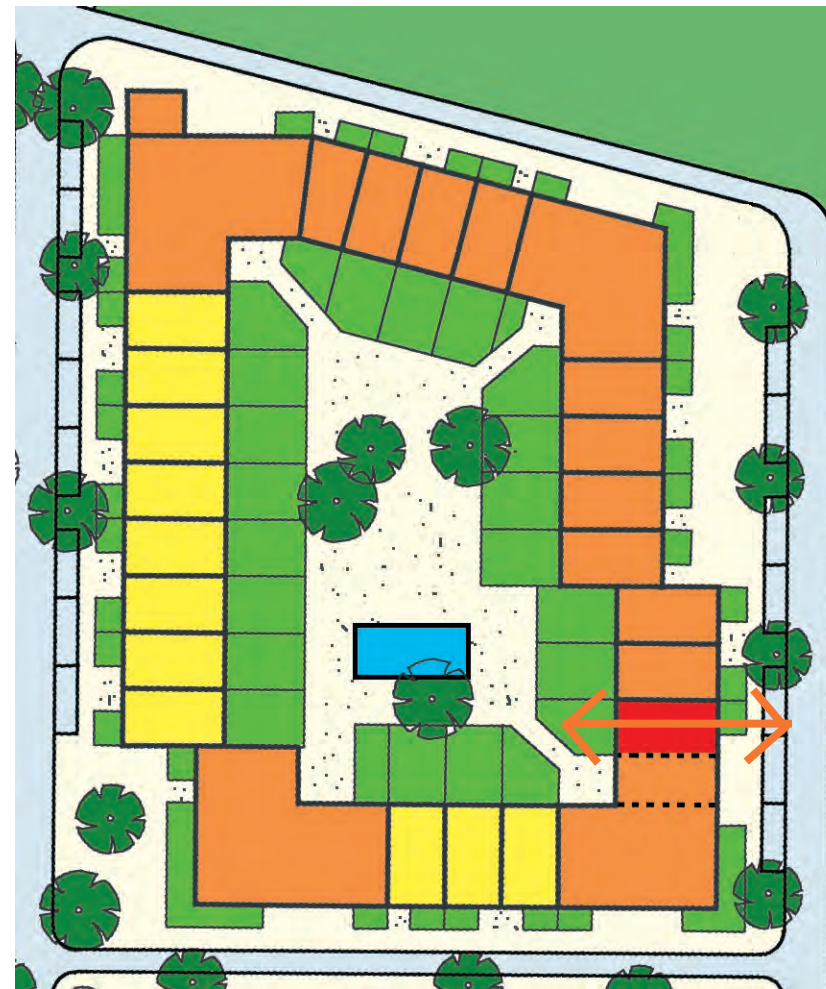
E. Underground garage parking

There is limited provision of underground parking around the Station Square. As this parking is entirely underground the relationship of the parking garage to the street would simply be in terms of vehicular and pedestrian entries and exits, and ventilation requirements.

- Refuse and recycling
- Bicycle parking



2.2.5.H Courtyard with parking, access, refuse and bicycle parking



2.2.5.J Courtyard, access, refuse and bicycle parking

F. Service and Emergency access

This part of the design guide deals with vehicular access to properties, including fire access, refuse removal, commercial loading and delivery, and bicycle parking.

I. FIRE ACCESS

Most access will be from the street side of properties. Where surface courtyard parking is provided, this should allow access to fire tenders, enabling firemen to access the rear of properties.

II. REFUSE REMOVAL

As for fire access above, most refuse removal will be from the street side of properties. This will be located at a central point in each courtyard block, either in the access-way to the courtyard from the street, or within courtyard surface parking areas where these are provided. In each case, refuse areas will provide general refuse and recycling bins, and all should be visually screened. Access to these refuse areas will allow residents to bring their refuse through the courtyards, and refuse collection to take place from the street.

III. BICYCLE PARKING

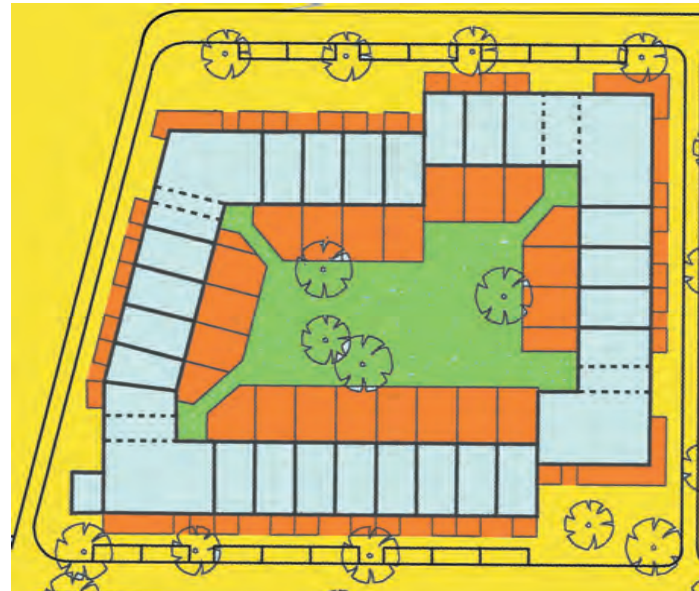
A key part of the strategy to reduce car use in the village, is providing a safe and pleasant environment for cyclists. This includes the provision of secure bicycle parking facilities. Bicycle hoops will be provided along main streets and boulevards, in or around the village's public spaces (including local squares) and parks. Bicycle parking will be provided in the courtyard blocks, and should be accommodated either in the surface parking areas (where these are provided) or in the courtyard access-way.

IV. COMMERCIAL LOADING AND DELIVERY

Loading and delivery access will generally be to the front of premises, except where premises back onto covered parking podiums, in which case this servicing can be from the rear, through the parking area. In general, servicing should be managed by allocating particular times for loading and delivery, especially where commercial properties are accessed from pedestrian areas, such as in the station square.



2.2.5.K Commercial access at Station Square should be time managed



- Public areas
- Semi-public areas
- Private areas



2.2.5.L Commercial loading and delivery



2.2.5.M Definition of space ownership-plan and detailed plan

V. MAINTENANCE

Long term success of Stapolin Village will depend on the maintenance of a high quality environment, including both private and public outdoor spaces. Clear definition of private and public space, and definition of responsibility for maintenance of public spaces is important. Private outdoor space consists of both front and back gardens, and is well defined on the plan. Demarcation with low hedges or fences will assist in definition.

Public space is made up of several elements. These, and the agency responsible for their maintenance, are listed below
 Streets and Pavements (including boulevards) – These are usually taken in charge and maintained by the local authority;
 Neighbourhood Parks (including Stapolin Haggard) – taken in charge and maintained by the local authority. Other Public squares, including Grange Square and Station Square – taken in charge and maintained by the local authority.
 Semi-private Courtyards (including surface parking areas) – these will require the establishment of a management company to manage and maintain them, funded through a levy on properties in the village.

2.3

URBAN DETAILING & LANDSCAPE STRATEGIES

The view towards Moyne Lodge



2.3.1.A The new masterplan structure has developed from the existing green structure.



The view towards Ireland's eye



2.3.1.B Existing landscape elements

A. General Landscape Philosophy

The existing landscape and topography has been a key determinant of the Stapolin Village masterplan layout. As previously farmed land, it is a constructed landscape rather than a natural one. Nevertheless, it has various elements that the Masterplan responds too; including views, contours, trees and hedgerows, and other traces of its previous uses such as farm tracks and traces of old stone walls.

The location of Stapolin Haggard is determined by two factors. It is at the highest point in the site, so that it has a greater sense of openness, and allows better views between buildings to the open landscape beyond the village. It also encompasses the remains of an old farmhouse and compound. It therefore includes both the largest group of mature trees on the site and a number of old stone walls, which will be retained and used to structure the space of the Haggard.

There are views out from the Haggard, over open space in the green belt. The Masterplan structure picks up a view of Ireland's Eye along one of the two principal Boulevards, between Station Square and Stapolin Haggard. Views of the parkland are framed by the layout of buildings at the north end of Mayne Road. The second boulevard runs along the line of an existing farm track, with mature trees to either side. Although many of these are not in good condition, these will be replaced so that the tree-lined track of the old farm becomes the central tree-lined boulevard of the new village. Other tracks and hedgerows are retained as links between Stapolin Haggard and the open spaces.

The re-use of existing 'found' elements, retains a part of the value of this landscape, and links the new development to its context, both physically and in time.



2.3.1.C Total area of soft surface



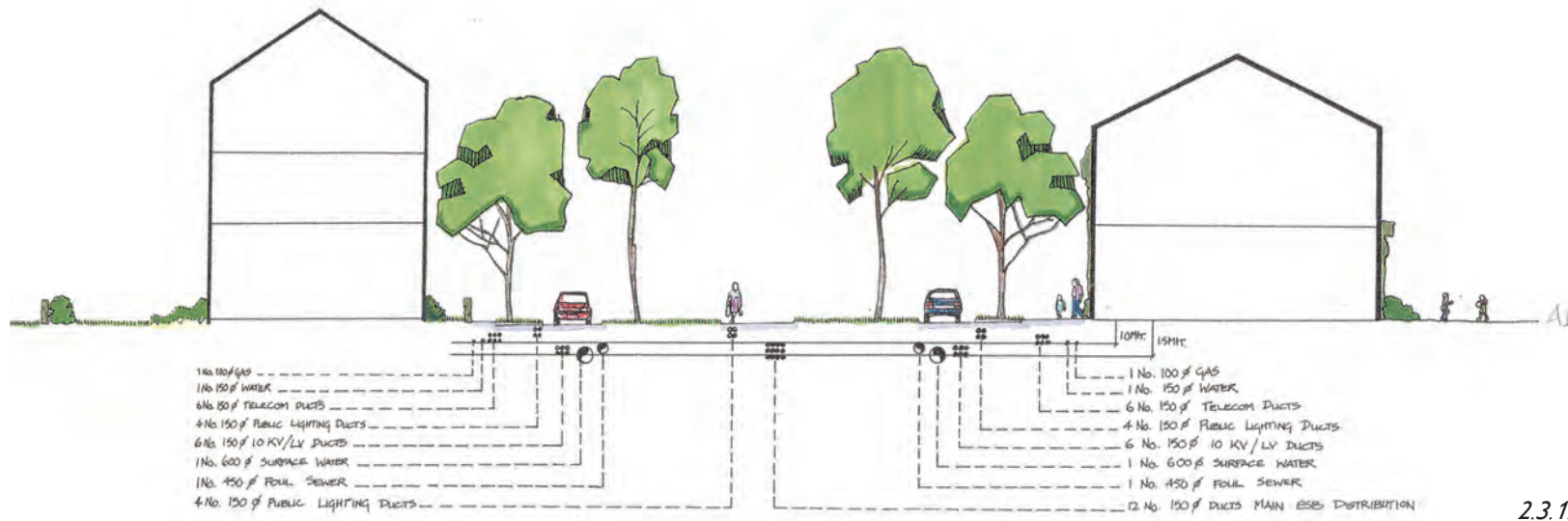
2.3.1.D Public soft surface

B. The Stapolin Landscape Strategy

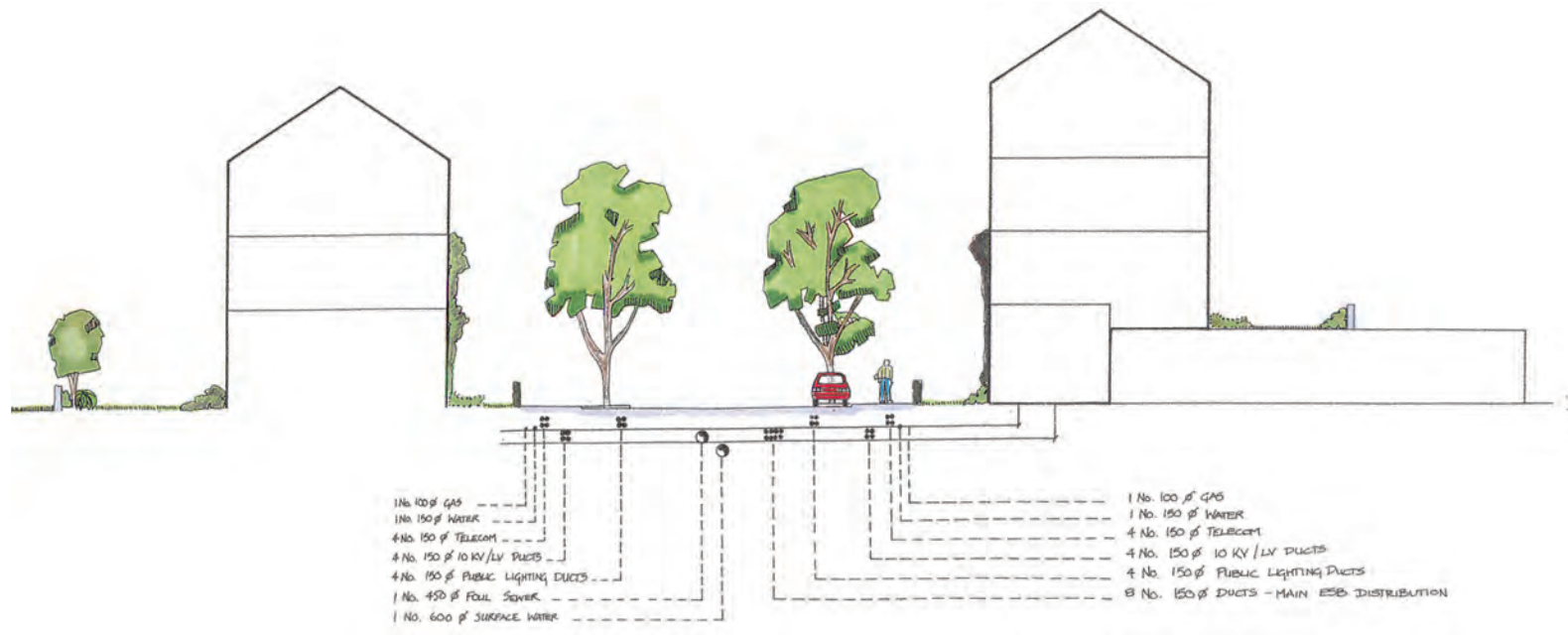
The landscape strategy for the built up area will build on an overall maritime theme to resonate throughout the site. The landscape philosophy has been developed to reinforce the identity of the village, to create a sense of community and hence a sense of place.

The design for each area will be governed by the following principles:

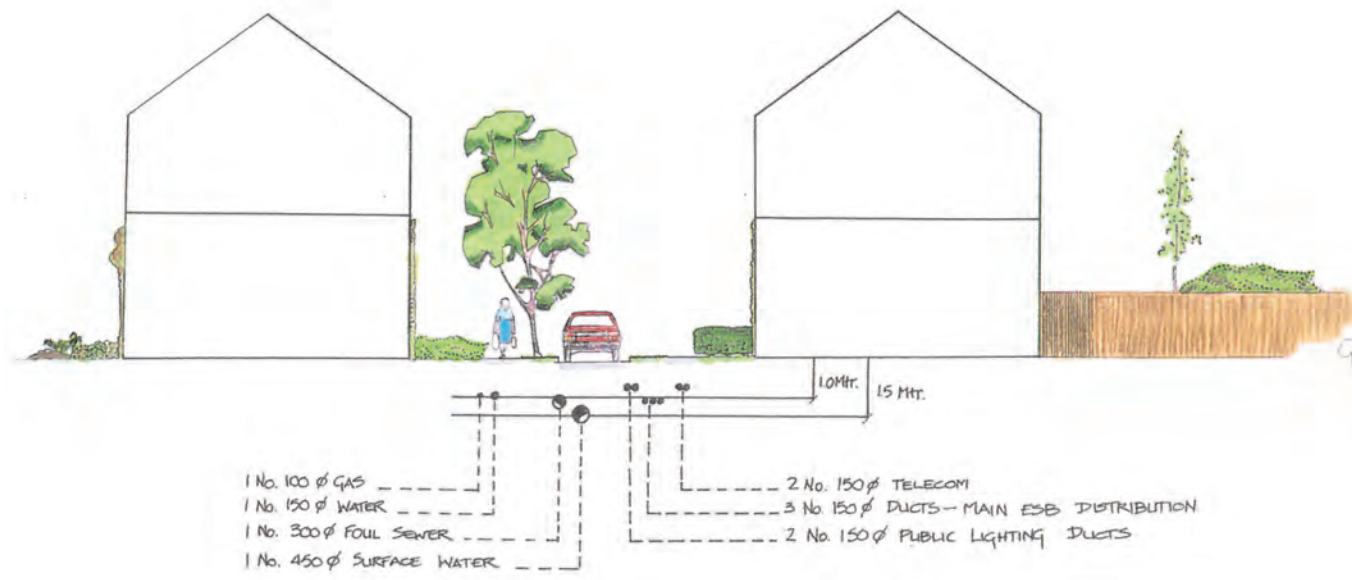
- Links to the Green Belt – design of the space between buildings will emphasise the spacious quality of the Green Belt by orientating views towards the Green Belt where possible, and especially to Ireland’s Eye and Howth.
- Soft landscaping will be maintained throughout the village. The amount of ‘hard surface’ will be kept to a minimum. All ground surface materials will be high quality. These elements will also be used to indicate a hierarchy of space.
- A distinctive design theme will be used to differentiate between the different types of open space within the village. These will harmonise with the overall theme.
- Street furniture for each area will be sculptural in effect and designed with the theme in mind. A definite theme will apply to each area or zone, which in turn relates to the overall design theme to create unity throughout the site.



2.3.1.E Service corridors, Boulevards



1.F Service corridors, Main Streets



3.1.H Service corridors, Narrow streets

C. Co-ordination

The landscape design concept for the village must take services, drainage, vehicular, pedestrian and cycle routes into consideration. An awareness of the service corridors, the impact of planting on buildings, drainage patterns, emergency access and circulation routes will aid the successful implementation of the design concept.

I. SERVICE CORRIDORS

The service corridor will, for the most part, follow circulation routes. Due to the need for access and the reluctance to impinge on circulation routes, the majority of services will be placed under street parking and pavements. This position of the service corridor is therefore an important consideration when siting trees within the streetscape.

II. LIGHTING

Lighting is an important element in creating ease of movement. It will also be used to create atmosphere and highlight features. This type of lighting must co-ordinate with street lighting. It must be designed in a manner to minimise light pollution especially in ecological areas. At pinch points and pedestrian crossings lighting will be used to indicate that pedestrian movement has priority over vehicular movement.

III. VEHICULAR MOVEMENT

Cars, delivery trucks and emergency vehicles will all require access to the village. The design treatment of the streetscape must recognise and emphasise areas that require occasional access and permanent access. However, the design should place a greater importance on the cyclist and the pedestrian in 'people dominated' places.

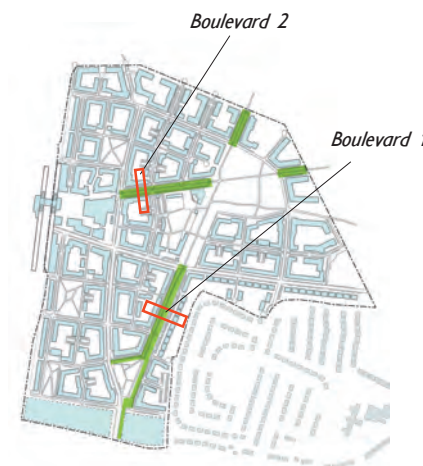


2.3.2.A Boulevard 1. Detailed plan and Section (41,5m wide)



2.3.2.B Boulevard 2. Detailed plan and Section (28m wide)

2.3.2.C Landscape images & Details



2.3.2.Landscape and urban detail elements

A. Boulevards

I. PLANTING

Large upright trees will be planted along these avenues to direct and focus views. The trees will be tall growing to complement the height of buildings. 1.5 metre tall hedging will be used to reinforce the linear avenue effect.

II. HARD SURFACES

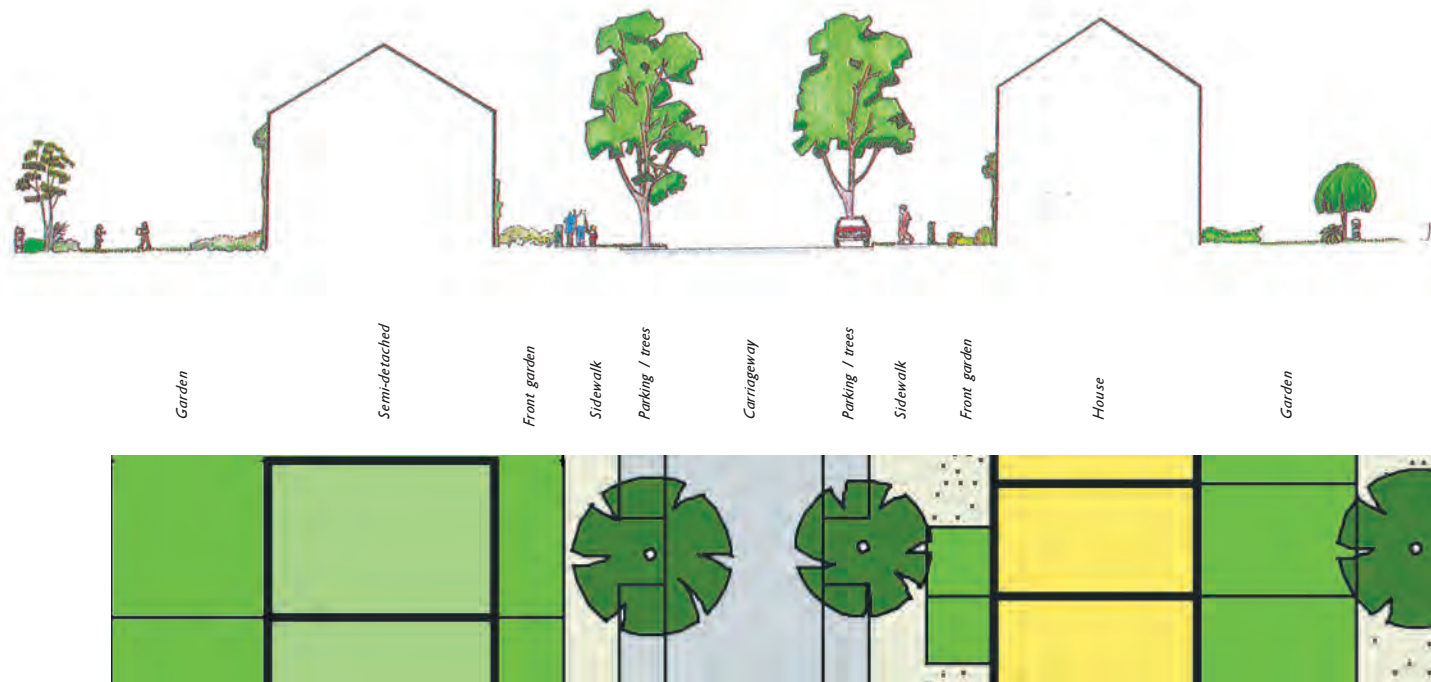
The pavement along the boulevard will be predominantly neutral, but with patterning to provide a streamlined avenue effect. Subtle details will be integrated into the pavement in the form of high quality cobble work. These will highlight trees, sculpture pieces and building entrances.

III. LIGHTING

Lighting is on two levels. Ambient lighting will provide for the safe movement along the street. Special effect lighting will be incorporated to highlight the avenue effect, up-lighting trees and buildings. Low level lighting will define the edges, highlight pavement details and changes of level.

IV. STREET FURNITURE

The use of bollards, cycle parking, and ground level signage will be incorporated into the design so as not to obstruct the linear flow of the street. Seating along these routes will be secondary and subtly incorporated where space allows. Seating will be sculptural in nature and oriented to face either the pedestrian area or the vehicular corridor. Planting schemes around seating areas will be designed to minimise fear of crime. Sculpture shall be incorporated primarily in the highly visible areas at junctions. Each piece should relate in scale and effect to the scale of the buildings and the amount of open space available.



2.3.2.D Main street 1. Detailed plan and section (22m wide)



2.3.2.E Main street 2. Detailed plan and section (18m wide)

2.3.2.F Landscape images & Details



B. Main Streets

These areas are essentially linear, with a sense of direction and creating linkage between landmark features. Each street will have a similar but slightly different character, to give it identity differentiation.

I. PLANTING

The streets will be lined with medium sized upright trees. Hedges are used to accentuate the linear effect. All plants will be wind tolerant and wind responsive to carry the design theme through. Their function will be to create a visual effect and reduce wind speeds.

II. HARD SURFACES

The patterns in the pavement will repeat that of the Boulevards, but on a smaller scale. Stone setts in conjunction with high quality concrete products will be used extensively to define edges, building entrances and street crossings.

III. LIGHTING

Lighting will primarily provide ease of movement and direction. The effect will be low level to accentuate the ground pattern. Glare and pollution to the adjacent buildings will be avoided.

IV. STREET FURNITURE

All bollards, bicycle parking, and seating will have a linking sculptural theme. Seating and sculpture will be incorporated into the ground pattern as focal points. Where possible the use of stone will be incorporated into all features. Signage will be illuminated cut stone where possible. The signage will be subtle and incorporated into the building walls or pavement where possible.





2.3.2.G Secondary streets. Detailed plan and section (16m wide)

2.3.2.H Landscape images & Details



C. Secondary Streets

These streets act as links to the main routes. They are more intimate in scale. Landscape elements are therefore reduced in scale to provide a more comfortable and relaxing environment.

I. PLANTING

The trees will be light in texture to soften building outlines without creating shade. Hedging will be used with the patterned pavement to guide the speed and direction of pedestrian movement. The hedging will be low level and evergreen. Groundcover planting will be used to interlock with the pavement pattern, so introducing as much greenery into the streetscape as practically possible.

II. HARD SURFACES

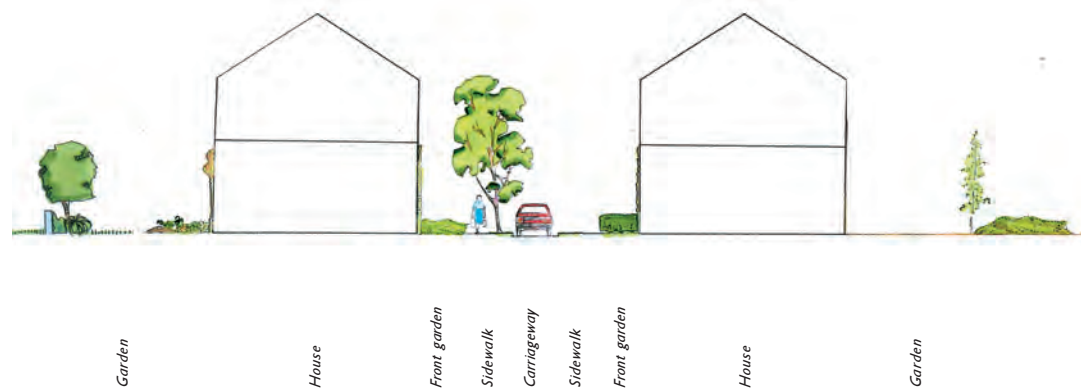
The small scale of the street in relation to the vertical scale of the trees requires a more detailed and interesting pavement design. The emphasis will be on creating interest and pattern, unlike the streamlined avenue effect of the primary streets, in order to draw the eye down to ground level and emphasise the width of the street rather than the height. Similar materials to those in the larger streets will be used. Paving shall differentiate between the main streets and pinch points. This will highlight the priority given to pedestrians and cyclists at these points.

III. LIGHTING

Low level lighting will highlight direction. Key spotlights will highlight changes in level and features. Upper level lighting will be downwards and away from buildings.

IV. STREET FURNITURE

Art and poetry will be subtly combined in the form of pavement stones and wall plaques illustrating poetry. Seating will be isolated stone seats, regularly spaced down the street. Signage will emphasise the priority given to cyclists and pedestrians at pinch points and raised tables.



2.3.2.J Narrow streets. Detailed plan and section (10m wide)

2.3.2.K Landscape images & Details



D. Narrow Streets

I. PLANTING

The planting scheme will be the main feature of this street, with bold architectural plants to be used as focal points. This will make the space visually interesting while maximising the sense of space. Small town trees with an upright habit and climbers will reinforce, yet soften, the vertical boundaries created by the buildings.

II. HARD SURFACES

The street will have no surface differentiation between thoroughfare and pavement. It will be conceived as an outdoor space rather than solely as a means for circulation. A slight change in level or alteration to the paving pattern will be enough to delineate ownership. A subtle or perceived barrier will be employed between properties without creating physical barriers such as walls and hedges. The street appears open plan. The paving shall facilitate occasional vehicular access to the houses. The landscape treatment of the street discourages parking.

III. LIGHTING

Ambient lighting will be used along this street type to ensure safety of movement. Its position aims to minimise light pollution. The lamps will be objects of interest within the streetscape due to the simplicity and quality of design and materials.

IV. STREET FURNITURE

Street furniture consists of simple yet innovative design. It shall be appropriately placed within the design.



Local park. Perspective as shown below



2.3.2.L Local park. Detailed plan



E. Local Parks

The local parks will be designed with an Irish literary theme in mind. Their style and subject matter will influence the design. This will form a link between the local parks. The design concept for the local parks will enhance the pedestrian environment by giving careful consideration to circulation routes and desire lines.

I. PLANTING

Planting design for these 'literary' parks will utilise the symbolic nature of plants in religion and mythology.

II. HARD SURFACES

Hard surfaces shall consist of high quality water bound macadam. This will help to retain a perceived hierarchy of space. Cobble detailing will highlight features. Words from a poet's work may be incorporated to create a directional flow through the space.

III. LIGHTING

Lighting will create ease of movement and emotional response. In these parks, which will target the senses, memory and association, lighting should be used creatively. It will highlight features and be a feature in its own right.

IV. STREET FURNITURE

The design of the street furniture will be subtle yet extract inspiration from the theme of the park.





F. Local Squares

I. PLANTING

Planting will form the focal point of these squares. Unusual trees attract attention and dense canopied trees provide shelter. The ornamental planting should reinforce the maritime theme of the area. However, it shall be considerate of the character and sense of community in the streetscape.

II. HARD SURFACES

These small squares shall be primarily hard landscaping. They will be surfaced with a high quality concrete product. The hard landscaping will identify circulation routes and rest areas.

III. LIGHTING

The lighting will create ease of movement and utilise light from adjacent street lamps. It will highlight features within the square.

IV. STREET FURNITURE

The placement of street furniture in this park will be sympathetic to desire lines and circulation routes. Seats shall be sculptural and linked to the maritime theme.



2.3.2.0 Landscape images & Details



2.3.2.N Local square. Detailed plan



Local square.. Perspective



Local square



2.3.2.P Creche court, perspective



2.3.2.Q Detailed plan, internal court



G. Internal Courts and Private Gardens

These will be static spaces. Views will be contained within the spaces themselves. The courtyards will need strong sculptural features to hold attention and focus within the space. These spaces will be 'garden-like' in scale and should be extensively used by the residents. They can vary in design theme, although with an overall similarity to the maritime theme. The spaces will incorporate seating, relaxation spaces and play areas. They should be visually stunning as they are the prime view for the surrounding residents.

I. PLANTING

Tree planting will be light in texture to avoid creating dark shaded spaces. The principal divisions within the spaces will be formed with medium sized evergreen hedges. Plants used will generally be ornamental in appearance, scented and easily maintained. All year round interest from a selection of plants is desirable.

II. HARD SURFACES

Stone will be used extensively. The units will be small in scale, ranging from sets and cobbles to pebble.

III. LIGHTING

The lighting will be low level to highlight steps, features and planting. Emphasis will be on the light effect rather than on the fitting, which will be concealed where possible.

IV. STREET FURNITURE

In keeping with the green belt areas and the streets, the seating will be sculptural in form. Stone will be used extensively. The scale of the seats and features will be small. Sculpture will be incorporated as a combination of subtle elements and dominant focal points. Poetry will be extensively incorporated into stone features, as a pleasant 'find' within the space. The large dominant focal pieces will be dramatic and provide a dominant visual attraction in the space. Gates will be sculptural also. They will be treated as pieces of art, and form part of a suite, which will be recognised from courtyard to courtyard.



Same dimensions as Stapolin Station Square



Station Square



2.3.2.S Detailed plan, station square



2.3.2.T Landscape images & details



H. Station Square

This square's character is defined by its commercial use and its function as a thoroughfare and meeting point for commuters. Its spatial layout takes inspiration from the city plaza, which allows ease of movement. The design shall take the square's possible use as a venue for street entertainment into consideration.

I. PLANTING

Trees will be planted to accentuate greenery in the space. Semi-mature plants will be used for instant effect. The lower level planting will define static seating areas within the space. Low level hedges and groundcover planting will provide a textural contrast to the rigid paving framework.

II. HARD SURFACES

The main bulk of the pavement will be a high quality, durable concrete product, which will have a surface texture to prevent individuals slipping. Stone will be introduced to highlight features, changes of level, and seating areas. All stone will be limestone, which is indigenous to the area. The maritime theme will be carried into the space to provide a link with the green belt area. Cycle traffic will be encouraged to use direct routes through the square and minimise disruption to the pedestrians.

III. LIGHTING

Functional lighting will be provided to illuminate the open space at night. The space will be open at night and adequate lighting is required to reduce the potential for, and fear of, crime. Lighting will be used to highlight pedestrian movement through the spaces as a priority.

IV. STREET FURNITURE

The street furniture for this area will have an urban feel, and be a showcase for functional sculpture and design. Seating and sculpture can act as one, with seating doubling as sculptural pieces. Seating will be orientated towards features such as larger sculptures and water elements.

2.3.2.V Landscape images & Details



I. Stapolin Haggard

This area of the village already has its own valuable character, providing a link to the site's past and giving the Haggard a sense of place. The design should be sympathetic to this and any design should work with the existing planting and circulation.

I. PLANTING

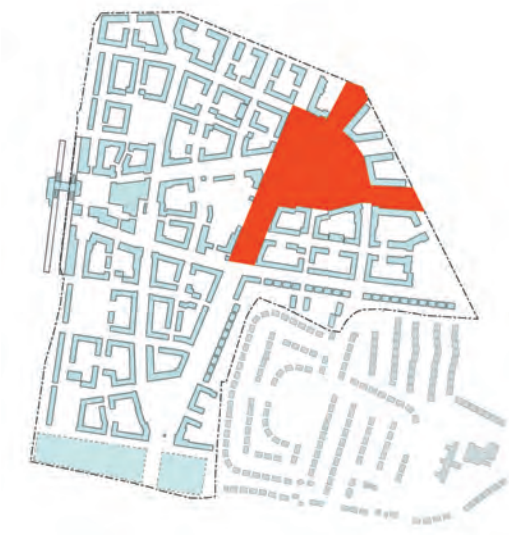
The existing planting shall be retained. The plant choice and association should reinforce the rural quality of this space within its urban surroundings.

II. HARD SURFACING

All nodes or meeting points shall be paved with high quality stonework. Circulation routes shall be surfaced with water bound macadam.

III. STREET FURNITURE

The design of street furniture shall be sympathetic to the character of the site. Signage and information panels will be incorporated into the site. Information panels should make people aware of the history of the site. All elements should be high quality.



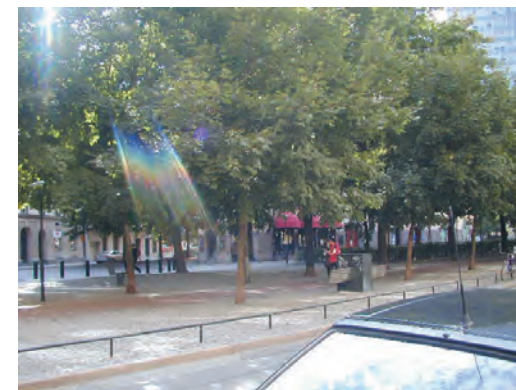
2.3.2.U Stapolin Haggard Detailed plan



Grange Square. Perspective, as shown below



2.3.2.X Grange Square Detailed plan



2.3.2.W Landscape images & Details

J. Grange Square

I. PLANTING

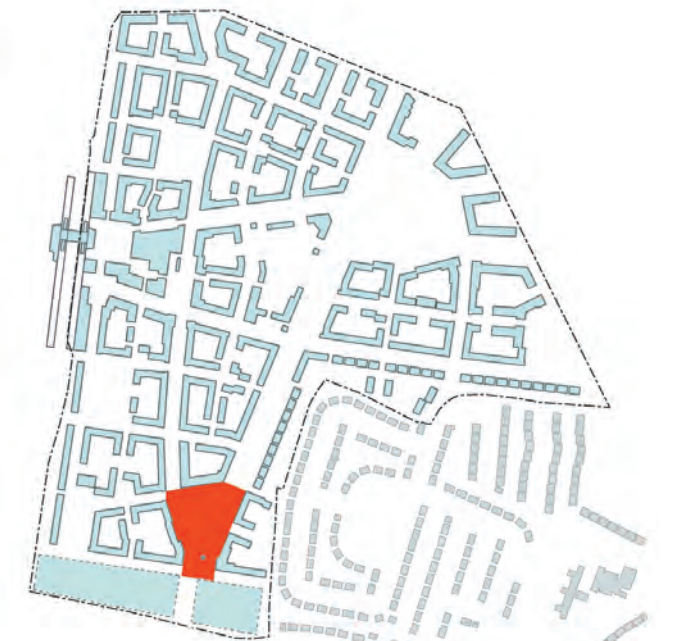
The planting plan will fully utilise and reinforce the existing avenue. Its potential for softening the building line should be maximised. Clusters of tall trees will be positioned to combine with street trees to soften the building line. Ornamental planting will be used in key spaces within the square. Hedges shall be used to define spaces.

II. HARD SURFACING

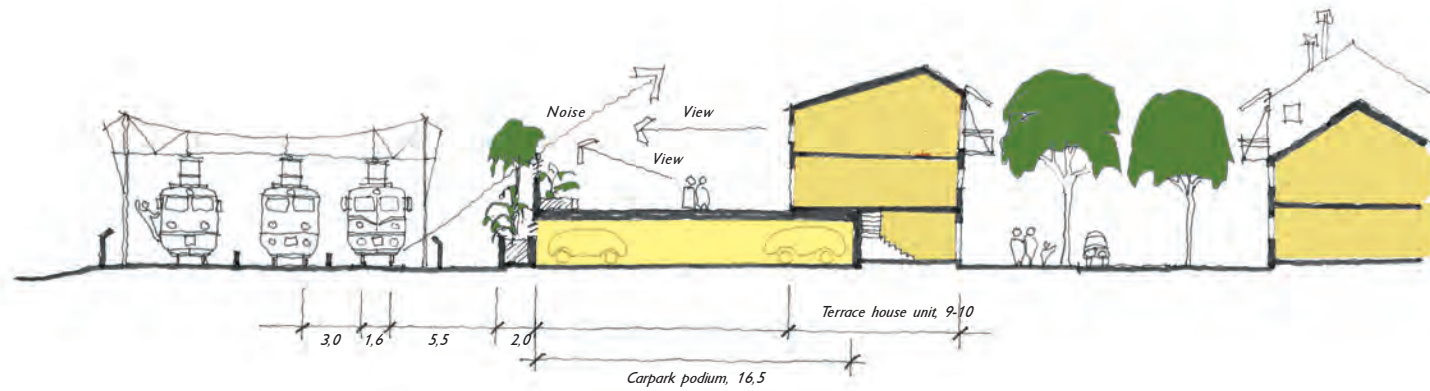
High quality stonework will be used to highlight key areas. Water bound macadam shall surface the pedestrian and cycle routes.

III. STREET FURNITURE

Street furniture shall be appropriately placed within the designed space. The design of the street furniture should be appropriate to the style and concept of the space. Signage should be employed to create ease of movement for visitors.



2.3.2.AA Landscape images & details



2.3.2.Y Railway edge, section



2.3.2.Z Perspective from above. Green belt north-east

K. Perimeter Edges

Perimeter areas are vital for the integration of the development and surrounding areas, particularly on the green belt edge, where the treatment will act as a transition, or buffer zone, between the hard lines of the built area and the open green space. Treatment of the buffer zone must create a sense of security for the occupants of perimeter housing. The perimeter edges must facilitate cycle and pedestrian access.

I. GREEN BELT – NORTH SIDE

The objective here is to provide uninterrupted views of the open space from buildings on the edge of the development. This is accomplished by use of a ha-ha fence, giving the impression that the green surface runs uninterrupted right up to the building edge. There will be no hard surface fronting the buildings. The ha-ha will be integrated with the existing hedge line. Vertical structures in the transition zone will be kept to a minimum except where safety and protection require. Stone will be the primary material for the wall capping and pavement linkages through to the open space.

II. GREEN BELT – EAST SIDE

On the eastern side differentiation will be formed by the northern fringe sewer embankment. This will be extensively shaped and modelled to achieve a neutral buffer between the built space and the wetland areas. Pavement materials and feature details used in the green belt park will be introduced into the urban areas to unify the design theme. Footpath facilities will be incorporated into the earthworks to allow alternative glimpse views of the urban area and the green space.

II. RAILWAY EDGE

The linear nature of the railway track will be accentuated in the pavement, planting and building lines. Noise reduction is important in this area, and will be achieved through the extensive use of trees, hedges and embankment groundcover planting.

BALDOYLE - STAPOLIN VILLAGE**NARROW STREETS****TREES**

CARPINUS betulus 'Fastigiata'	(Hornbeam)
CORYLUS colurna	(Turkish Hazel)
MALUS tschonoskii	(Japanese Crab Apple)
PRUNUS maackii 'Amber Light'	(Mahogany Cherry)
PRUNUS padus 'Grandiflora'	(Bird Cherry)
SORBUS aucuparia 'Sheerwater Seedling'	(Mountain Ash)
SORBUS intermedia	(Mountain Ash)
SORBUS 'Joseph's Rock'	(Mountain Ash)
SORBUS thuringiaca 'Fastigiata'	(Mountain Ash)

SPECIMENS FOR CONFINED SPACES

EUONYMUS europaeus	(Spindle Tree)
PRUNUS cerasifera 'Heesii'	(Hees' Cherry)
PRUNUS lusitanica	(Portuguese Cherry)
PRUNUS serrula tibetica	(Tibetan Cherry)

TREES FOR MEDIUM SIZE STREETS

ACER campestre 'Elsrijk'	(Field Maple)
ACER platinoides 'Columnare'	(Norway Maple)
ACER platinoides 'Globosum'	(Globe Maple)
BETULA costata	(Korean Birch)
BETULA verrucosa 'Tristis'	(Weeping Birch)
FRAXINUS excelsior 'Geesink'	(Ash)
FRAXINUS excelsior 'Jaspidea'	(Ash)
FRAXINUS ornus	(Manna Ash)
PRUNUS padus 'Grandiflora'	(Gean)
SORBUS aria 'Lutescens'	(White Beam)

ACCENT TREE AT PRIME LOCATIONS

QUERCUS robur 'Fastigiata'	(Fastigate Oak)
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TREES FOR WIDE STREETS AND AVENUES

ACER platinoides 'Farkles Green'	(Norway Maple)
ACER pseudoplatanus 'Negenia'	(Sycamore)
AESCULUS hippocastanum 'Baumannii'	(Horsechestnut)
FRAXINUS excelsior 'Westhof Glory'	(Ash)

PLATANUS acerifolia	(London Plane)
PRUNUS avium 'Plena'	(Bird Cherry)
TILIA cordata 'Rovo'	(Common Lime)
TILIA cordata 'Greenspire'	(Lime)

- OPEN SPACES**BLOCKS OF APARTMENTS AND THE PARK****STAPOLIN HAGGARD****CLASS II OPEN SPACES****TREES**

	Specification
ACER pseudoplatanus 'Negenia'	(Sycamore)
AESCULUS hippocastanum 'Baumannii'	(Horsechestnut)
BETULA costata	(Korean Birch)
CASTANEA sativa	(Sweet Chestnut) RB
FAGUS sylvatica 'Asplenifolia'	(Fern Leaf Birch) RB
FAGUS sylvatica	(Beech) RB
FAGUS sylvatica 'Dawyck'	(Dawyck Beech) RB
PINUS sylvestris	(Scots Pine) RB
PRUNUS avium 'Plena'	(Double Gean) RB
QUERCUS castaneifolia 'Greenspire'	(Algerian Oak) RB
QUERCUS cerris	(Turkish Oak) RB
QUERCUS frainetto	(Hungarin Oak) RB
QUERCUS petraea	(Seasile Oak) RB
QUERCUS robur	(Common Oak) RB
QUERCUS robur 'Fastigiata Koster'	(Common Oak) RB
TILIA 'Petiolaris'	(Silver Lime)

Trees for Town Square

QUERCUS ilex 'Pyramids'	(Holm Oak)
QUERCUS robur 'Fastigiata'	(Fastigate Oak)
TILIA 'Petiolaris'	(Silver Lime)

- PARKLAND AND OPEN SPACES**SHRUBS**

ARBUTUS unedo	(Strawberry Tree) E
CORYLUS avellana	(Hazelnut)
ELAEAGNUS x ebbingei	(Oleander) E
ESCALLONIA macrantha 'Crimson Spire'	(Escallonia) E
ESCALLONIA sanguinea	(Red Escallonia) E
EUONYMUS europaeus	(Spindle Tree)
EUONYMUS japonicus	(Japanese Spindle Tree) E
FUCHSIA magellanica 'Riccartonii'	(Fuchsia)

**EVERGREEN - (E)/
DECIDUOUS**

GRISELINIA littoralis	(Griselinia) E
HIPPOPHAE rhamnoides	(Sea Buckthorn) E
ILEX aquifolium	(Holly) E
LIGUSTRUM ovalifolium	(Privet)
PHILLYREA angustifolia	(Italian Privet) E
PITTOSPORUM tenuifolium	(Pittosporum) E
ROSA pimpinellifolia	(Burnet Rose)
ROSA rugosa	(Dog Rose)
SYRINGA vulgaris	(Lilac)
VIBURNUM opulus	(Guelder Rose)

- PARKLANDS**WIND AND SALT TOLERANT****TREES**

	EVERGREEN - (E)/ DECIDUOUS
ACER campestre	(Field Maple)
ACER pseudoplatanus	(Sycamore)
ALNUS glutinosa	(Black Alder)
ALNUS incana	(Grey Alder)
CASTANEA sativa	(Sweet Chestnut)
CRATAEGUS monogyna	(Hawthorn)
FRAXINUS excelsior	(Ash)
ILEX aquifolium 'Hendersonii'	(Male Holly) E
PINUS mugo	(Mountain Pine) E
PINUS muricata	(Bishops Pine) E
PINUS nigra maritima	(Maritime Pine) E
PINUS thunbergii	(Japanese Black Pine) E
POPULUS alba	(White Poplar)
POPULUS canescens	(Grey Poplar)
POPULUS tremula	(Aspen)
PRUNUS lusitanica	(Portuguese Laurel)
QUERCUS cerris	(Turkish Oak)
QUERCUS ilex	(Holm Oak) E
SORBUS aria	(White Beam)
SORBUS intermedia	(Mountain Ash)
ULMUS procera	(English Elm)
ULMUS glabra	(Common Elm)

AREAS SUBJECT TO WATERLOGGING**TREES - DAMPTO WET LAND**

ALNUS cordata	(Italian Alder)
ALNUS glutinosa	(Black Alder)
ALNUS incana	(Grey Alder)
BETULA nigra	River Birch)
BETULA pendula	(Common Birch)
HIPPOPHAE rhamnoides	(Sea Buckthorn)
POPULUS alba	(White Poplar)
POPULUS tremula	(Aspen)

POPULUS x canescens (Grey Poplar)
 RHAMNUS frangula (Buckthorn)
 SALIX alba (White Willow)
 SALIX pentandra (Bay Leaved Willow)
 SALIX purpurea (Purple Willow)
 SORBUS aucuparia (Mountain Ash)
 TAXODIUM distichum (Swamp Cypress)

- RAILWAY EMBANKMENT

THORN AND BERRY PRODUCTION

CRATAEGUS MONOGYNA (HAWTHORN)
 HIPPOPHAE RHAMNOIDES (SEA BUCKTHORN)
 PRUNUS SPINOSA (BLACKTHORN)
 RHAMNUS CATHARTICA (BUCKTHORN)
 FRANGULA ALNUS (ALDER)
 ROSA RUGOSA (DOG ROSE)

TREES - LARGE COURTYARD

ACER davidii hersii (David Maple)
 ACER griseum (Chinese Maple)
 ACER pseudoplatanus 'Brilliantissimum'
 AESCULUS carnea 'Briotii' (Red Horsechestnut)
 ALNUS glutinosa 'Laciniata' (Cut Leaf Alder)
 BETULA costata (Korean Birch)
 BETULA ermanii (Japanese Birch)
 BETULA jacquimontii (Himalayan Birch)
 CORYLUS colurna (Turkish Hazel)
 COTONEASTER cornubia
 CRATAEGUS orientalis (Oriental Hawthorn)
 FAGUS sylvatica 'Dawyck' (Dawyck Beech)
 FAGUS sylvatica 'Dawyck Gold' (Dawyck Golden Beech)
 MALUS tschonoskii (Japanese Crab Apple)
 PRUNUS serrula 'Tibetica' (Tibetan Cherry)
 ROBINIA pseudoacacia 'Frisia' (Robinia)
 SORBUS aucuparia 'Asplenifolia' (Cut Leaf Mountain Ash)

TREES - SMALL COURTYARD GARDENS

ACACIA baileyana 'Purpurea' (Mimosa)
 EUCRYPHIA intermedia (Eucryphia)
 EUONYMUS europaeus (Euonymus)
 LIGUSTRUM chenaultii (Weeping Privet)
 LUMA aiculata (Myrtle)
 PRUNUS maackii 'Amber Light' (Mahogany Cherry)
 PYRUS salicifolia 'Pendula' (Weeping Pear)

BALDOYLE

STAPOLIN VILLAGE - COURTYARD CLIMBERS/WALL PLANTS

INTERNAL

CLIANTHUS puniceus
 CYTISUS battandieri
 GARRYA elliptica
 ITEA illicifolia
 JASMINIUM beesianum
 JASMINIUM nudiflorum
 PASSIFLORA caerulea
 PARTHENOCISSUS tricuspidata

EXTERNAL

HEDERA helix 'Buttercup'
 HEDERA helix 'Cristata'
 HEDERA helix 'Ivalace'
 HYDRANGEA petiolaris
 JASMINIUM officinale
 LONICERA periclymenum 'Serotina'
 PARTHENOCISSUS quinquefolia

- COURTYARD GROUND COVER

SHADE

BERGENIA 'Ballawley'
 CONVALLARIA majalis
 EUONYMUS fortunei 'Mimimus'
 HEDERA helix 'Hibernica'
 POLYGONATUM x falcatum
 SARCOCOCCA hookeriana
 SARCOCOCCA humilis
 STEPHENANDRA incisa 'Crispa'
 TRICYRTIS hirta
 OMPHALODES cappadocica

SUN

AGAPANTHUS 'Peter Pan'
 AGAPANTHUS 'White Dwarf'
 ALCHEMILLA mollis 'Auselesi'
 GENISTA hispanica
 GERANIUM 'claridge Druce'
 GERANIUM endressi 'Wargrave Pink'
 GERANIUM sanguineum
 HELLEBORUS niger

SOUTHWALLS (S)

(Lobster Claw) **S**
 (Moroccan Broom) **S**
 (Garrya)
 (Itea)
 (Red Jasmine)
 (Winter Jasmine)
 (Passion Flower) **S**
 (Boston Ivy)

(Ivy)
 (Ivy)
 (Ivy)
 (Climbing Hydrangea)
 (Jasmine)
 (Late Honeysuckle)
 (Virginia Creeper)

HELLEBORUS orientalis (Lenten Rose)
 HEMEROCALLIS x 3 colours (Day Lily)

SPECIMEN - INTERMIXED

ARALIA cachmerica (Kashmir angelica)
 CHIONOCHLOA flavescens (Tussock Grass)
 CHIONOCHLOA flavicans (Dwarf Tussock Grass)
 CRAMBE cordifolia (Sea Kale)
 RHEUM palmatum 'Atropurpureum' (Chinese Rhubarb)
 ZANTEDESCHIA aethiopica (Calla Lily)
 CRAMBE cordifolia (Sea Kale)
 CYNARA cardunculus (Cardoon)

- PODIUM PLANTING GROUND COVER

BUPLEUREUM fruticosum (Sea Carrot)
 CEANOTHUS thrysiflorus repens (Californian Lilac)
 CISTUS x corbariensis (Sun Rose)
 CISTUS x cyprus (Sun Rose)
 CISTUS x pulverulentus (Sun Rose)
 HALIMIOCISTUS 'Ingwersenii' (Sun Rose)
 HALIMIOCISTUS sahucii (Sun Rose)
 HALIMIUM calycinum (Sun Rose)
 HELIANTHEMUM in variety (Rock Rose)
 IBERIS sempervirens

SPECIMEN SHRUBS

DRIMYS lanceolata (Wintergreen)
 OSMANTHUS delavayii (Chinese Holly)
 PHILADELPHUS 'Manteau de Hermine' (Mock Holly)
 SPIRAEA thunbergii 'Snowmound' (Spiraea)
 VIBURNUM plicatum (Way Faring Tree)

- COURTYARD HEDGES AND FEDGES

BUXUS sempervirens (English Box)
 EUONYMUS fortunei (Euonymus)
 LAVANDULA 'Hidcote' (Lavender)
 LAVANDULA 'Munstead' (Lavender)
 PRUNUS lusitanica (Portuguese Laurel)
 SPIRAEA thunbergii (Mountain Spiraea)

FEDGES

CLIMBING PLANTS ON A SUPPORT (USED AS A HEDGE)

HEDERA helix (Ivy)
 JASMINUM beesianum (Red Jasmine)
 LONICERA periclymenum (Honeysuckle)