

CONNECTIVITY

Improving connectivity, integration and permeability will be critical to the success of the Naas Road Development Framework.

Reflecting its current use and the ad hoc nature of past development, the area is currently characterised by cul-de-sac industrial and commercial development accessed off a limited number of busy through routes. The result is an illegible environment that is confusing to drivers and inconvenient, uninviting and arguably in many places unsafe for cyclists and pedestrians. This situation is compounded by the limited number of junctions and crossings on the Naas Road, creating a significant barrier to movement across the site.

The aim of the Development Framework is to 'repair' the urban fabric of Naas Road - creating a legible layout with short blocks and multiple direct connections that offers a choice of routes to, from and within the area. Wherever possible the Framework seeks to connect with surrounding residential and commercial development (whether existing or proposed) to integrate them into resolved walkable neighbourhoods with shared facilities.

Given the heavy congestion of the N7 and M50, and the challenges of climate change

and peak oil, it is vital that the Naas Road becomes an area where future residents, employees and visitors are not reliant on the private motor car as their primary means of transport. Failure to do so will severely limit the scope for transformational change in the local environment and the viability and resilience of future development. The area benefits from good public transport connections to Tallaght and Dublin City Centre and is within relatively easy cycling distance of both centres. Significant improvements to the walking, cycling and public transport network will be required, both on and off site, in order to achieve the modal shift required to realise the full vision.

It is recognised that it will take time to fully realise the necessary improvements to the street network and transport infrastructure. The Framework therefore identifies priority connections that in the short-medium term can best improve permeability, opening up key areas of the site for development and assisting in changing the character of the Naas Road from major distributor to urban boulevard.

A wide range of stakeholders will have a role to play alongside South Dublin County Council in improving the area's connectivity, including

landowners, Dublin City Council, the National Roads Authority and, in particular, the Dublin Transportation Office, who will be required to co-ordinate improvements to the wider transport network.

The city as a tree

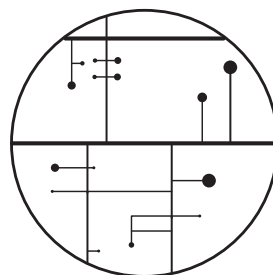
'Ladders' describe an access system to areas within the city which become impassible/inaccessible for the public in general - essentially gated. Access is linear and sequential only. The areas behind the gates become guarded zones, usable only to a small amount of people or sometimes even for no one.

Open city

In a 'Network' the city is accessible and stays usable for all. This particular character of connectedness is multi-layered, facilitating emergent systems of exchange, synergy and sustainable development.

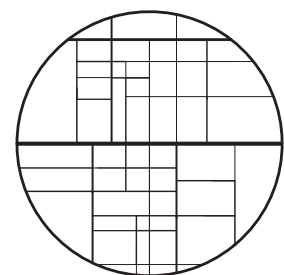


Ambition

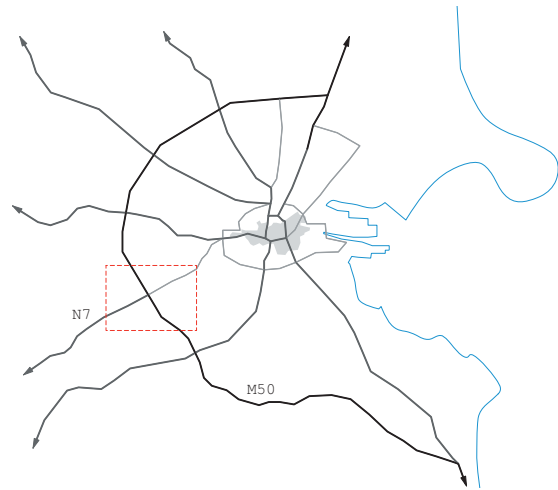
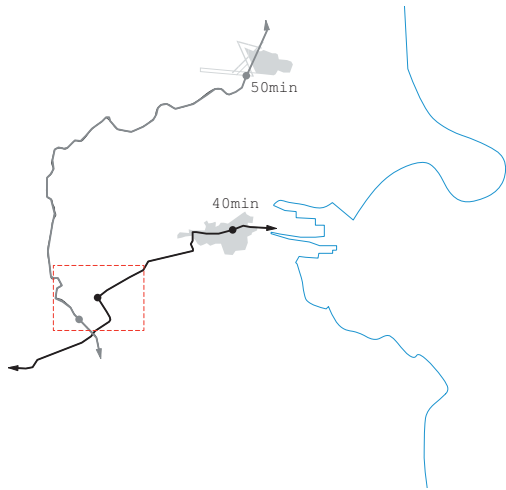


Ladders

vs.

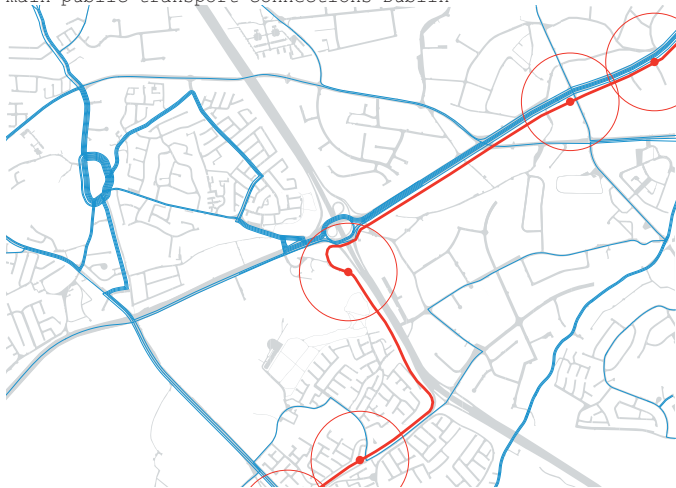


Network



main public transport connections Dublin

main road network Dublin



public transport Naas Road area

important roads Naas Road area



cul-de-sacs non residential road Naas Road area

connectivity today



Naas Road



Robinhood Road



Woodford Downs

OPEN SPACE

The area lies between the Liffey valley and Dublin mountain foothills - a gently undulating landscape with an east west grain resulting from glacial deposits. Much quarrying and excavation over time has reduced whatever subtle legibility the topography once gave. What remains is the Clondalkin ridge and the depressions along the two rivers - Camac and Robinhood.

As a built entity Dublin's western edges are not spatially defined. The current sprawl has been market driven and has overtaken the last notional edge definition - the three open space fingers separating Tallaght, Clondalkin, and Lucan. The westward leapfrogging of development along major arteries has produced a low density pocketed landscape with little overall coherence. What open space exists is often ambiguous in its reading - frequently walled or buried in backland conditions. The existing green belt zoning south of the N7 being the largest single existent open space increment - a green lung reaching from the west. Its edge definition is now under threat.

The study area lies within the catchment of the Camac River and particularly its tributary, the Robinhood River. The surface water network is essentially those

rivers with significant lengths of the network in culverts. The network development expansion was piecemeal on foot of individual and unconnected developments. As in the greater Dublin area, the surface water network is now straining with repeated symptomatic flood events in the areas. Presently prone river network is almost invisible and does little in terms of identification.

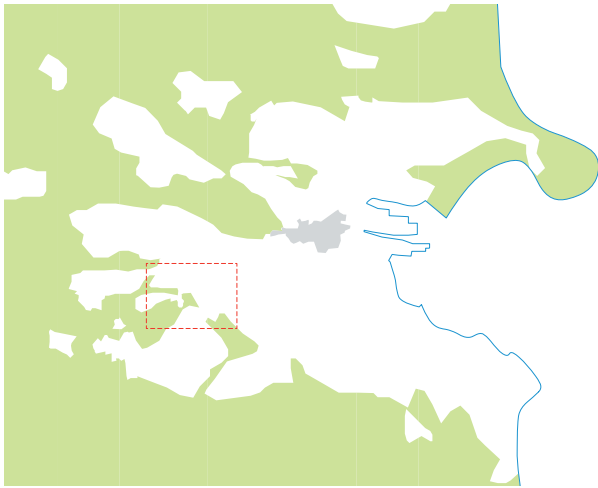
The eighteenth century Grand Canal is a powerful event in the landscape - its plan alignment being a structuring east west element connecting city with the its western hinterland. Access and uses along the Canal are problematic but the potential to structure and characterise is enormous.

These three elements, the green belt, the Robinhood river and the canal are key to an ambition to let open space play a meaningful and strategic role in urban development.

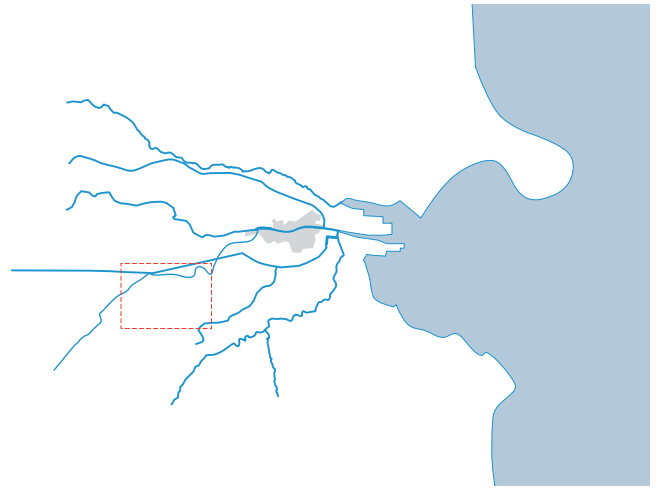
Perception of open space in an urban context is observed as being negative; in many situations in the surrounding areas it is dealt with as a backlands or leftover space, rather than as a quality. This Development Framework has the ambition to change this relationship and use open space as a powerful tool to unfold identity, invite for uses and in general be an important

factor in quality of urban life.





green lungs Dublin



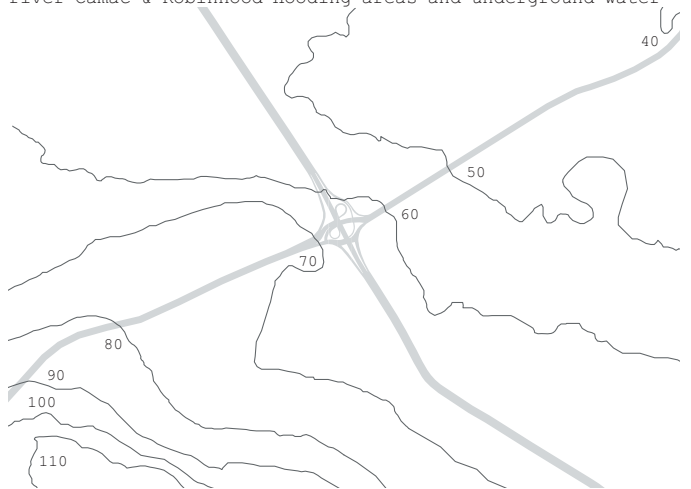
watercourses Dublin



existing parks, sports grounds & greenfields



river Camac & Robinhood flooding areas and underground water



topography

open space today



View to Kilakee and Cruagh Mountains



Ballymount Park



The Grand Canal 9th Lock gate

MIXED USE

The traditional Development Plan zoning methodology has over time resulted in generally single function areas - the absence of a mix of uses generates sterile discrete environments and the very separation of uses itself produces unnecessary and ultimately unsustainable traffic generation.

The Naas Road Development Framework is structured around the principle of the walkable neighbourhood - placing homes and businesses within easy walking distance of each other and of retail, leisure and community facilities; i.e. within 400 metres or a 5 minute walk, extended up to 800 metres (10 minutes) for certain higher order services such as secondary schools or light rail.

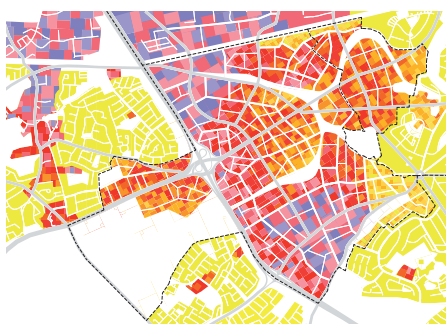
The emphasis on walkable neighbourhoods does not prevent certain areas within the Development Framework being used for a single purpose, such as the concentrating of industrial uses in the Oak Road Character Area adjacent to the M50. Wherever possible however the Framework seeks to mix commercial uses, including light manufacturing, with residential. This approach is challenging to traditional zoning methods of planning and to the business models of certain types of developer, but is a defining characteristic of successful urban places.

The mix of uses will vary by neighbourhood, dictated by geography, connectivity, accessibility and the amount of commercial or industrial development. With the exception of the industrial areas in the north east and south of the Framework area, every neighbourhood will incorporate an element of residential development. This will be easily accessible by public transport (bus or LUAS) and served, at the very least, by convenience retail.

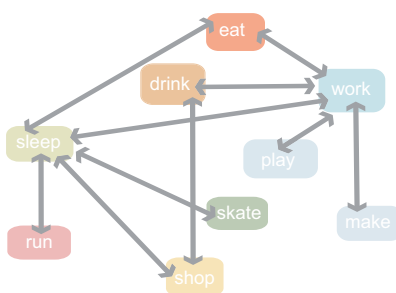
The greatest mix of uses and highest density of development will be concentrated around the Naas Road to maximise connections, take full advantage of public transport links and change its character from major distributor to urban boulevard.

One of the principle aims of the Framework is to create a legible layout that offers a choice of routes to, from and within the area. Over time the development of this street network will allow for the development of a fine urban grain with active frontages and adaptable buildings that allow easy change of use as the area evolves. Where existing uses are retained, the urban structure will need to be flexible enough to allow those sites to be incorporated as part of a wider neighbourhood; should the site ever become available or change use at a later date.

Where appropriate, the Framework seeks to maximise the integration of surrounding residential and commercial development within neighbourhoods, establishing new connections and allowing shared facilities. Key areas for integration include neighbouring residential areas in Greenhills and Dublin City Council's proposals for the development of a Prime Urban Centre in Kilemore.



Ambition



Zoning



Mixed use



residential



more recent light industry and office



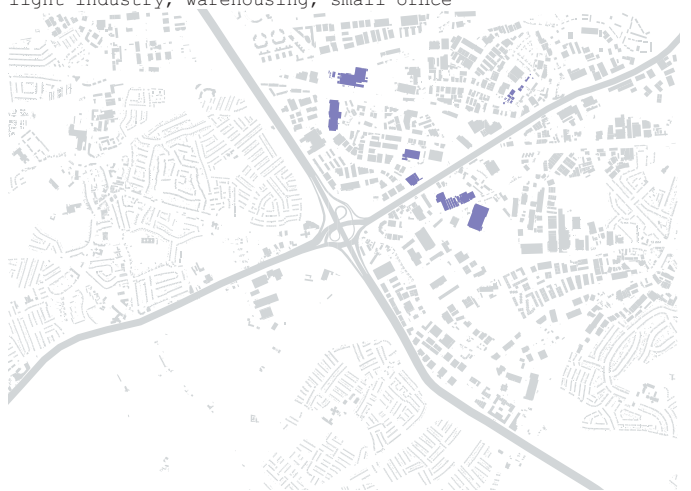
public buildings



light industry, warehousing, small office



integrated office park



high value industrial processes

uses today



Red Cow hotel



Turnpike Road



Robinhood Road

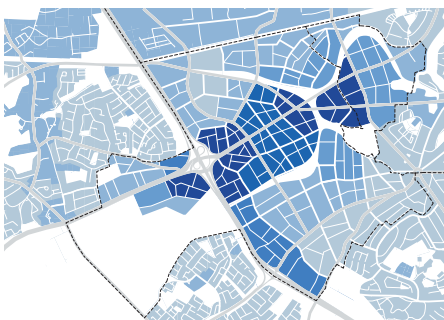
DENSITY

The availability of low cost land and a dependance on the private car and market forces, has resulted in low density fringe development disproportionate to Dublin's urban core. The cultural history of dispersed settlement in Ireland has delayed the coming to terms with the consequences of this pattern of development.

The typical current floor area ratio ranges from FAR 0.3 in residential areas to FAR 0.7 in industrial areas. A floor area ratio of FAR 1.0 is exceptionally found in the industrial areas inside the M50

A dense city model has the advantage of a small ecological footprint and more efficient use of the infrastructure network. It is a model that can lead to efficient land-use and mobility concepts and has the advantage and potential of creating a walkable city - a concept that directly responds to the idea of connectivity.

The study is predicated on the intensification of those areas of the site within the M50 ring - simply put the building out of existing brownfield sites must taken precedence over further westward expansion. Consequently those parts of the site outside the M50 require consolidation and rationalisation rather than being earmarked for strategic development.



Ambition



Dispersed City (LA, 1980 pop.8.37m)



Compact City (Buenos Aires, 1980 pop.8.37m)



figure

built area Dublin



plot ratio



ground



population per hectare

footprint and density today



Various situations east and west of M50



SUSTAINABILITY

The Naas Road Framework embodies a commitment to the highest standards of sustainability. Sustainability is concerned with how we live: specifically, with achieving widespread social and economic progress while protecting and enhancing the environment. Against a backdrop of a growing 'environmental imperative', humanity is challenged to find ways to live happily, healthily and well while breaking our dependence on resources that are both ecologically damaging and increasingly scarce.

The ultimate goal is a culture of sustainability: that people are able to live, work, pursue their interests and nurture their relationships in ways that are effortlessly and naturally benign. Development alone cannot create a culture of sustainability. It is important to recognise that people can be helped to live more sustainably, and well, by the way that places are conceived, designed, and used. This philosophy underpins the Naas Road Framework.

A vision for long-term urban transformation on the Naas Road needs to strike a balance between setting a clear direction towards sustainability outcomes and maintaining flexibility for development to respond to rapidly changing social, political, commercial, environmental contexts so the vision is realised through development over several decades. It is inherently difficult to predict the nature of those changes, but factors likely to influence the way people live and places function over the next 20-30 years include:

- increasingly strong and wide-ranging legislation at European, national and local levels to protect the environment and require developers to minimise negative environmental impacts;

- evolution of comprehensive carbon-pricing regimes designed to help tackle climate change by making fossil fuel energy more costly and promoting energy conservation and a switch to 'greener' alternatives;

- 'peak oil', leading to higher prices and greater volatility in supplies of oil and petrochemical products.

Against a backdrop of uncertainty about the future, the rational approach to take in establishing a resilient framework plan that minimises development risk, maximises returns and creates a lasting framework for change is, at minimum, to 'future proof' the plan as far as possible for the need to enable people to live more sustainably.

But there is also a more positive and ambitious case to be made for sustainable development which recognises that many of the qualities of place that enable people to live prosperously within environmental limits also help to create attractive, popular, high-value developments and more socially and economically integrated communities. These characteristics of 'sustainable urbanism' include: sufficient intensity to sustain a rich local mix of uses; housing that is mixed in type, tenure and income and provides 'a place to start and a place to stay'; adaptable building typologies accommodating changes of use over a lifetime; a legible and permeable form for walking and cycling; high-quality and varied public realm; productive landscapes for people and wildlife; and local food culture.

If those responsible for shaping the Naas Road area in the years to come – landowners, developers, design professionals, public authorities, residents and

businesses – commit to the delivery of a robust vision for sustainable development, they are likely to be rewarded with the emergence of a brand, identity and a competitive position. This brand is powerful when it is based on authenticity. Rather than clever technologies or iconic designs, this is what makes for 'exemplary' sustainability.

In that context, the Naas Road Development addresses sustainability on two levels:

- integrating into the framework plan for the transformation of Naas Road Gateway key 'fixes' based on sustainable urban design principles, enhanced connectivity, walkable mixed-use neighbourhoods with distinct characters, and managed transformation through multiple phases from its current fragmentation into a more intense and welcoming urban environment; and
- identifying a series of principles and key issues for consideration in the implementation of the development framework, including energy and resource management, urban ecology, community involvement, building typologies and 'behaviour change' for sustainability (including modal shift).



Tramway Strasbourg FR



Buslane Antwerp BE



Cycling lane Vondelpark, Amsterdam NL



Flooding landscape



Grips schoolgarden Berlin DE



Beguinage Bruges BE



GWL terrein KCAP Amsterdam NL



Sihlcity Zurich CH



Kennedy business center KCAP Eindhoven NL