



respond
building homes,
improving lives

Respond Design Guide

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on behalf of Respond.

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Fig.1. Cover Image
Beechpark, Respond

Fig.2. Millfield Cottages
Cork, Respond, CBA Architecture



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Fig.1. Family Fun Day
Lucan, Respond

Foreword

The Respond Design Guide is published at a landmark moment for Respond, and for the future of housing in Ireland. Respond believes that everyone has the right to a secure, affordable home that meets their needs throughout their lifetime. All Respond's initiatives focus on creating a more just and equal society, and aim to have a positive impact on the lives of the individuals, families and the communities we serve.

Respond tenure is life-long and inclusive and aims to cater for every cohort of society. Respond's vision is that every family and individual in Ireland will have high quality housing as part of a vibrant community.

Respond aspires to provide twenty percent universally designed homes. Respond retain and maintain the asset, therefore quality of design and robustness of materials used in construction are of paramount importance.

The asset should be durable, with an enduring life span of sixty years with low ongoing maintenance costs.

The Department of Housing, Local Government and Heritage published "Housing for All – a new Housing Plan for Ireland" which is the Government's housing plan to 2030. It is a multi-billion Euro plan which will improve Ireland's housing system and aims to deliver more homes of all types for people with different housing needs. Respond supports this overall Government objective; that every citizen in the State should have access to good quality homes: to purchase or rent at an affordable price, built to a high standard and in the right place, offering a high quality of life. Respond's design vision is that all homes are future proofed, and are designed for longevity through the provision of a minimum of twenty percent of universally designed homes in all our developments.

Respond's Strategic Plan 2022-2024 outlines its own vision and strategies to provide an ambitious annual target of housing supply in the right locations incorporating economic, social and environmental sustainability. Respond's approach to large-scale mixed tenure developments will set a new standard in housing provision in Ireland.

The Respond Design Guide aims to inform all of Respond current and future developments in partnership with our stakeholders, design team consultants, developers and contractors, local authorities, funders and others. The Respond Design Guide is a tool and benchmark to support our delivery of quality homes encapsulating our vision and guiding principles for delivery of quality sustainable homes and neighbourhoods.

The Department of Housing, Local Government and Heritage Sustainable Residential Development and Compact Settlement Guidelines for planning authorities was published in January 2024. These guidelines set out the policy and guidance in relation to the planning and development of urban and rural settlements, with a focus on sustainable residential development and the creation of compact settlements.

Developments that promote the health and well-being of communities in a supported way is at the heart of Respond's vision. One of the core values of Respond is to support, alongside national building standards, new homes that provide a high standard of amenity while also achieving sustainable and lower carbon developments.

Responds Design Guide encourages innovation in relation to housing design, lifetime homes and universal design, whole life cycle costings, delivery of value for money, innovation through modern methods of construction (MMC) and climate change. This is promoted not only for city living but also for non-urban and rural areas.

The Respond Design Guide has been written to communicate key design principles to all parties who are contributing to designing and delivering Respond schemes, both housing and community services. The guide has been designed as a tool to establish a benchmark for the design quality of all Respond projects.

In addition to this the guide focuses on climate change: climate management strategy on adaptation and de-carbonisation: and a strategic approach to biodiversity and living in close harmony with nature. Respond aims towards

inclusive design for an integrated community, with a focus on the principles of urban design which support communities to access physical and social infrastructure such as community buildings, sports facilities and crèches.

The guide focus is also on the principles of urban design, healthy placemaking and supporting communities to access physical and social infrastructure such as community buildings, crèches etc. Respond supports the idea of the 15-minute city (FMC): an urban planning concept in which most daily necessities and services, such as work, shopping, education, healthcare and leisure can be easily reached by a 15 minute walk, bike ride, or public transport. This approach aims to reduce car dependency, promote healthy and sustainable living, and improve well-being and healthy placemaking.

In supporting communities the design guide explores both housing principles inside the home and in the design approach of day care facilities for older persons, dementia friendly sensory gardens, childcare facilities, and family support and community spaces. In relation to quality urban design and place making the guide explores the principles of responsible built form, open space, the public realm, landscape and heritage taking into account current best practice to ensure inclusive communities can thrive.

Respond would like to thank all the stakeholders who contributed to the design guide both Respond's own internal and external teams and external contributors including members of the Royal Institute of Architects of Ireland (RIAI), Engineers Ireland (EI), the Construction Industry Federation (CIF), Irish Home Builders Association (IHBA), and local authorities who generously gave their time in the production of the guide and the Directors of the organisation and in particular our tenants and service users.



Aoife Watters

Respond CEO



Fig.2. Apartment building located within green landscape
Carrs Lane, Respond, Opperman and Associates

Respond's design approach, vision and aspirations



1. Champion equality, diversity, social justice and well-being.



7. Champion integrated support services within communities and developments.



2. All schemes to include a climate change mitigation strategy, a climate management strategy on adaptation and de-carbonisation, and a strategic approach to biodiversity and living in harmony with nature.



8. Balance capital costs and lifetime costs of development, consider the longevity of new buildings, value for money and affordability, and the lifespan of the building.



3. Promote regeneration outside of the site boundary, including enhancing biodiversity and living in harmony with nature.



9. Keep service charges and general running costs low.



4. Provide homes and communities that people are proud of, promote well-being, and a sense of place and belonging, which can be easily adapted to suit tenants needs.



10. Create a legacy of high quality homes, high quality buildings and spaces for communities.



5. Provide homes that promote independent living and high quality urban design solutions and placemaking.



11. Provide safe and secure place, with strategies embedded to mitigate anti-social behaviour by passive surveillance.



6. Respond are open to new ideas and innovation in low cost energy solutions and housing typologies.





1. Introduction

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1. Introduction



Fig.6. Creating communities by considering all elements of the built environment
Respond in conjunction with Ferreira Architects for EOI submission to DCC

“ Respond began as a social housing provider but recognised early on that housing does not exist in isolation but as part of a wider community. ”

Respond Strategic Plan 2022-2024

1.1. Purpose of the Respond Design Guide

This Design Guide sets out Respond's design approach, vision and aspirations.

The guide has been written to communicate key design principles to all parties who are contributing to designing and delivering Respond schemes, for both housing and community services; and puts user needs, health and well-being at the centre of the design process.

The guide has been designed as a tool to establish a benchmark for the design quality expected for Respond schemes, and should be referred to at all stages of design to reinforce best practice principles. Respond welcomes interactive design discussions throughout the design process.

Respond's vision is for every family and individual in Ireland to enjoy high quality housing as part of a vibrant community. Respond are aware of the evolving diversification of our communities in terms of cultures, languages and traditions. We recognise the importance of diversity and inclusion awareness in informing the best design outcome for the built environment, and designs should therefore always take into account current best practice to ensure inclusive communities can thrive.

All Respond projects are to include a climate change mitigation strategy; a climate management strategy on adaptation and de-carbonisation; and a strategic approach to biodiversity and living in close harmony with nature.

Individual projects will need to clearly address how they will respond to climate change, with sustainability requirements considered at scheme conception and throughout the lifespan of the building.

The Respond Design Guide is designed to be read in conjunction with current versions of technical guidance documents, national policy, local policy, and the standards set out in the scheme briefing document. Appendix B sets out a preliminary list of baseline documents.



Fig.7. Placemaking and creating communities
Allotments at Baltinglass, Respond, PD Lane Associates

1.2. Designing for longevity and future proofing for communities

Designing high quality homes and spaces for communities can transform lives and enable new communities to flourish, improving the quality of everyday life for generations to come.

Having clear principles for successful, sustainable communities should allow for future trends in living, developments in technology and changes in demographics. For example, homes and facilities should be suitable for an aging population and cycles of young

families moving into a neighbourhood every 15-20 years.

Future-proofing principles should be used to ensure that Respond homes and communities can be enjoyed by generations to come.

Ideas for incorporating future-proofing are included within this guide and should form a key focus at all stages of a project, including delivery.



Fig.8. Community Gardening promotes social and intergenerational interaction
Respond



Fig.9. Encouraging interaction with nature and the built environment
Clean-up Day Gleann na hEorna, Respond

1.3. Design principles for varying scheme types

The guidance within this document covers a number of scheme types including:



New projects from master plan stage.



Inherited projects (post planning).



Cost rental.



Retrofitting existing buildings.

Best practice suggested within the Respond Design Guide should be integrated within the design development process. For inherited projects and existing buildings, where there are scheme specific constraints, innovative design solutions should be considered to deliver the optimum quality of space for the intended users.

To ensure the longevity of all projects, consideration should be given to the longevity of all constituent elements, and these should be discussed at each stage of design.

1.4. Process of developing the Respond Design Guide

Development of the Respond Design Guide process took place over an extended period. A comprehensive programme of workshops with both internal and external stakeholders was carried out to inform the content and structure of the final document.



Respond Tenants Workshop 6th October 2022



Consultation with Respond's existing tenants was an important and informative part of the extensive consultation process. Respond would like to thank their tenants for their valuable input.

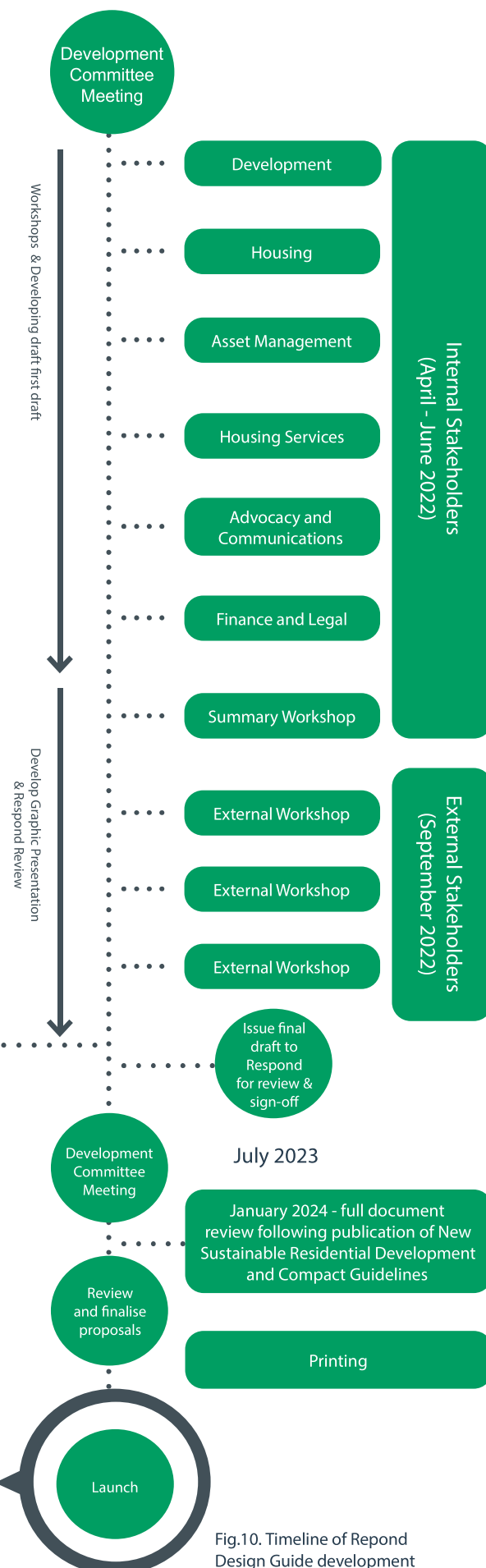


Fig.10. Timeline of Repond Design Guide development

1. Introduction

1.5. Internal stakeholder consultations

The Design Guide is based on the extensive experience of Respond's internal teams built up over many years delivering new homes and building and managing communities. Best practice approaches, visions and aspirations were explored during a number of workshops with Respond's internal teams.

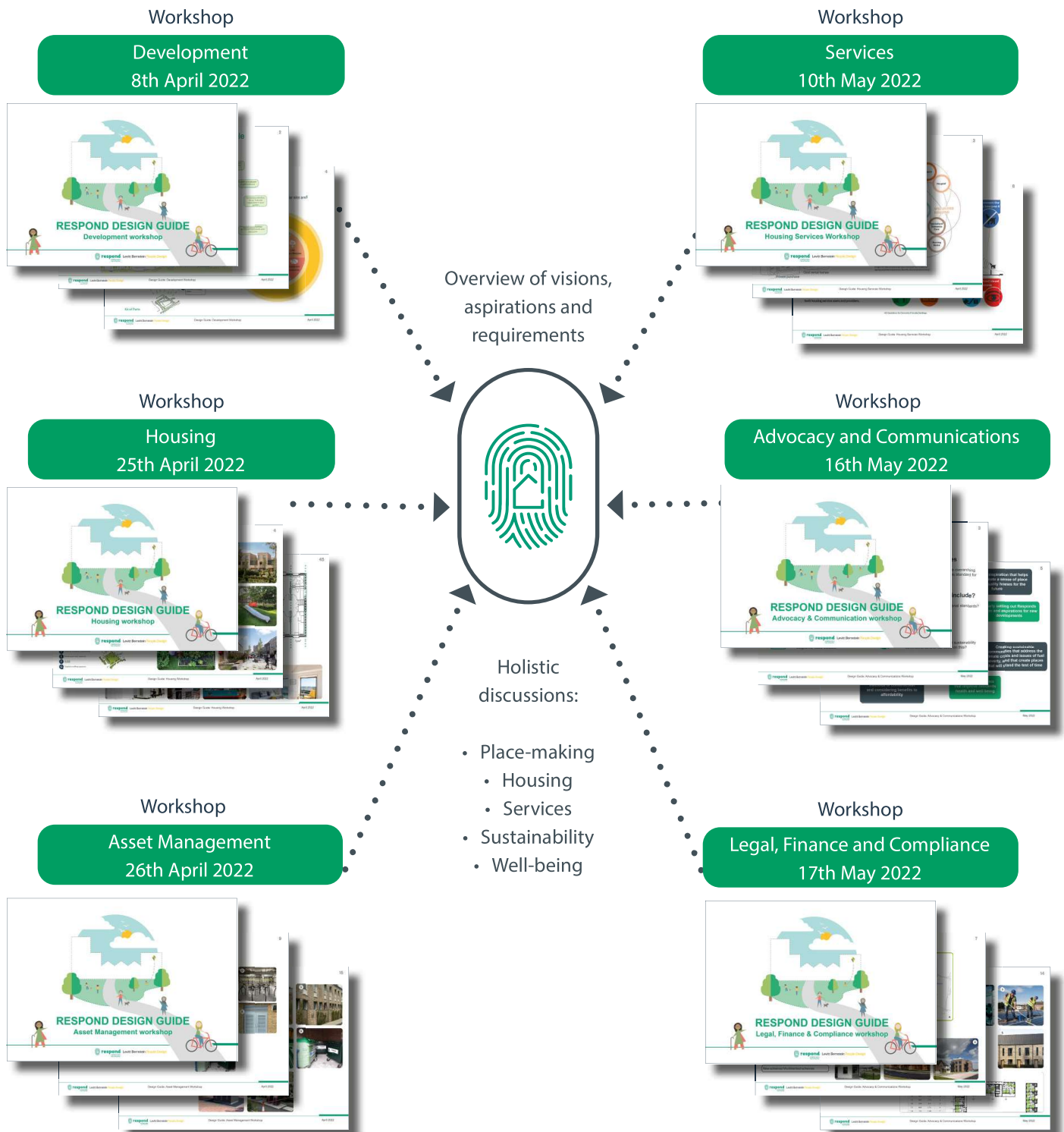


Fig.11. Internal stakeholder consultations

1.6. Summary of the external stakeholder engagement

Ideas were presented and reviewed with external stakeholders to inform the content of the Design Guide. Numerous stakeholders have informed the content and refinement of the Respond Design Guide. Respond would like to extend their thanks to:



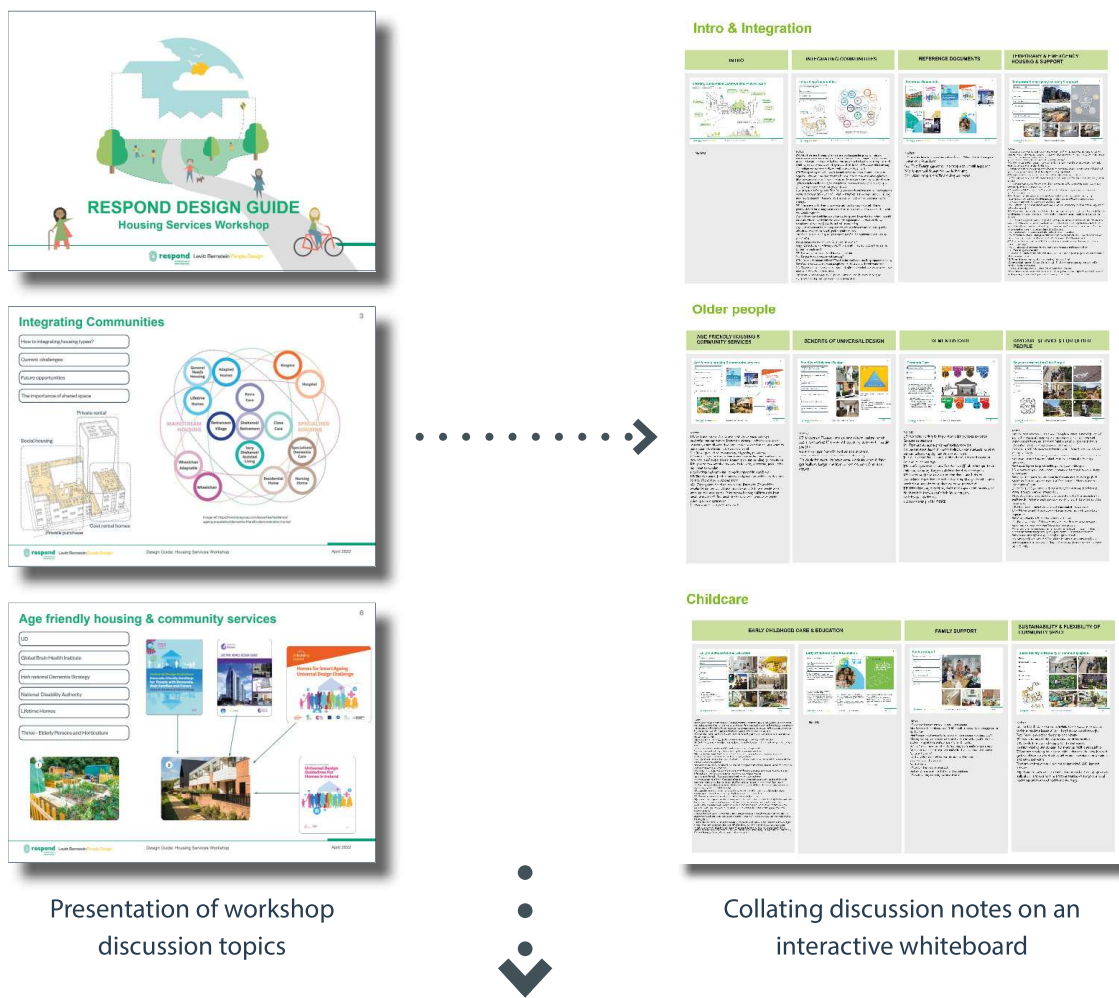
Fig.12. External stakeholder engagement

1. Introduction

1.7. Workshop process and collating information

Online workshops were held with a range of contributors, typically involving a short presentation followed by a discussion facilitated using an interactive online whiteboard to aid discussion.

Workshop format



Following the workshops the draft guide was produced in collaboration with Respond's management team prior to the Design Guide being finalised.

Drafting the Design Guide



1.8. Using the Respond Design Guide

The Respond Design Guide has been designed to be read in two ways.

Full version

The full document provides a detailed review of all topics contained within.

The Respond Design Guide is an aspirational document which is to be read alongside the reading list set out in appendix B.



Executive summary

Reading the introduction of each chapter will provide an executive summary of the Respond Design Guide.

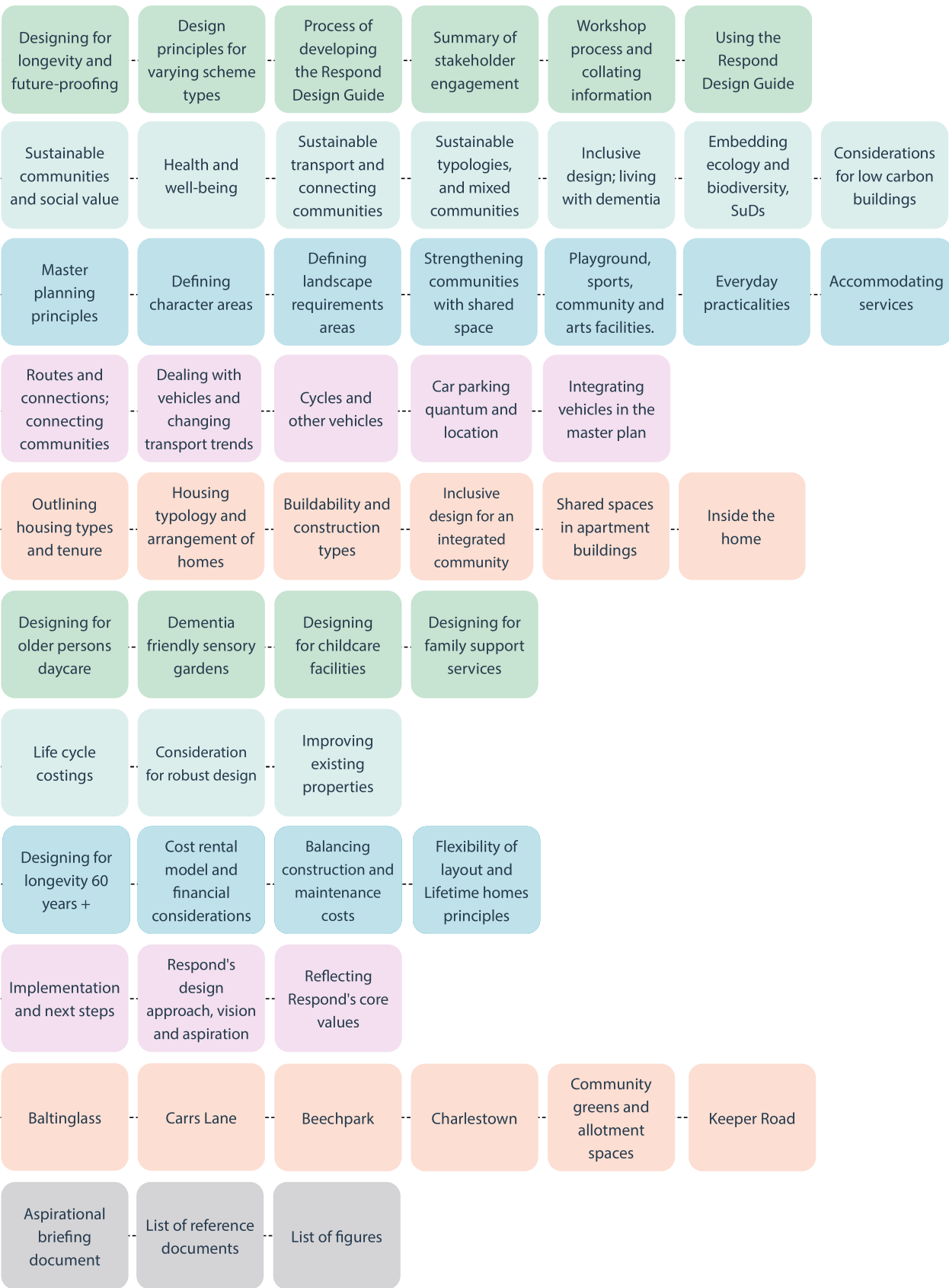


1.9. Structure of the Respond Design Guide

The guide has been arranged into distinct chapters which can be referred to together or independently throughout the design of any scheme.

This diagram is a tool to help navigate the document. It should be used in conjunction with the main contents page and detailed content at the start of every chapter.









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2. Sustainable communities

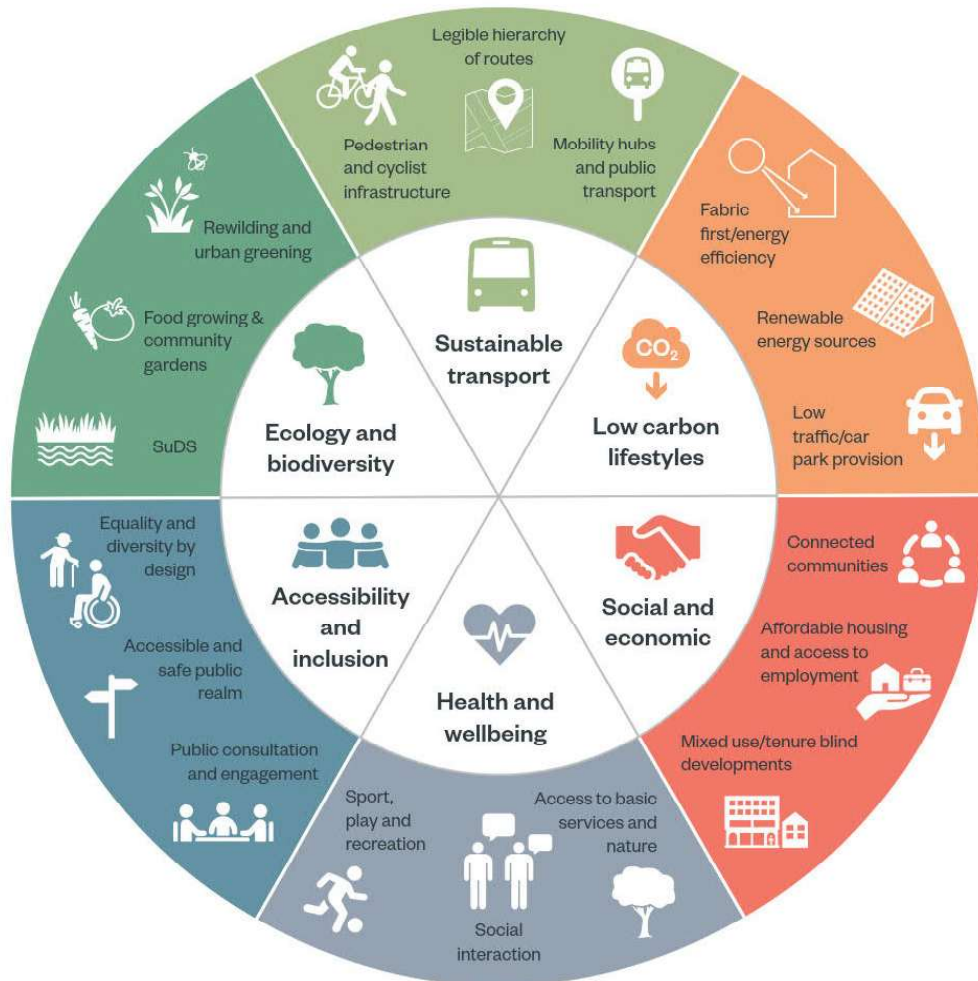


Fig.14. Sustainability tool kit
Levitt Bernstein

“ All our developments will endeavour to enhance the natural world around us and not adversely impact the environment without redress. Through the design of our housing and communities, we will be mindful of our ethical obligations to pursue national goals of sustainable development through energy efficiency and the reduction of carbon emissions. ”

2.1. Introduction to sustainable communities

Sustainable principles are at the heart of all Respond schemes.

Respond seek to provide spaces, buildings and communities with a strong sense of place that will offer flexibility, adaptability and lifetime homes that include every cohort of society for their lifetime. This core principle underpins the development of sustainable communities as set out in this chapter.

Climate change mitigation measures are also crucial to the development of sustainable developments and should be discussed at all stages of design, along with adaptation, resilience of buildings and places to climate change, and encouraging biodiversity.

Respond ensure their design teams work closely with The Climate Action Plan 2023 (CAP23), and Sustainable Residential Development and Compact Settlement Guidelines at all stages of design.

Respond take pride in ensuring schemes align with the key factors identified in Compact Urban Growth Guidelines which includes aligning with the principles of:

- Compact growth.
- Sustainable mobility.
- Enhanced amenity and heritage use.
- Support the transition to a low carbon and climate resilient society.
- Management of water, waste and other environmental resources.
- Encourage the benefits of connecting spaces and tenants with nature.
- Encourage facilitation of low carbon life styles and active travel.
- Encourage social and economic interaction.
- Develop flexible design principles which aid accessibility.
- Reduce future energy costs to ensure that schemes will be affordable and energy efficient, thereby reducing fuel poverty for tenants.

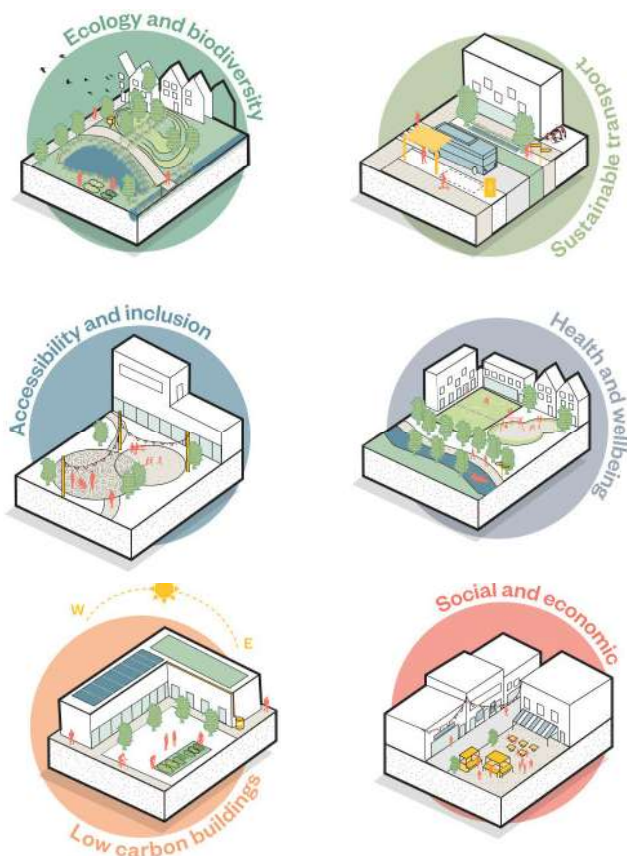
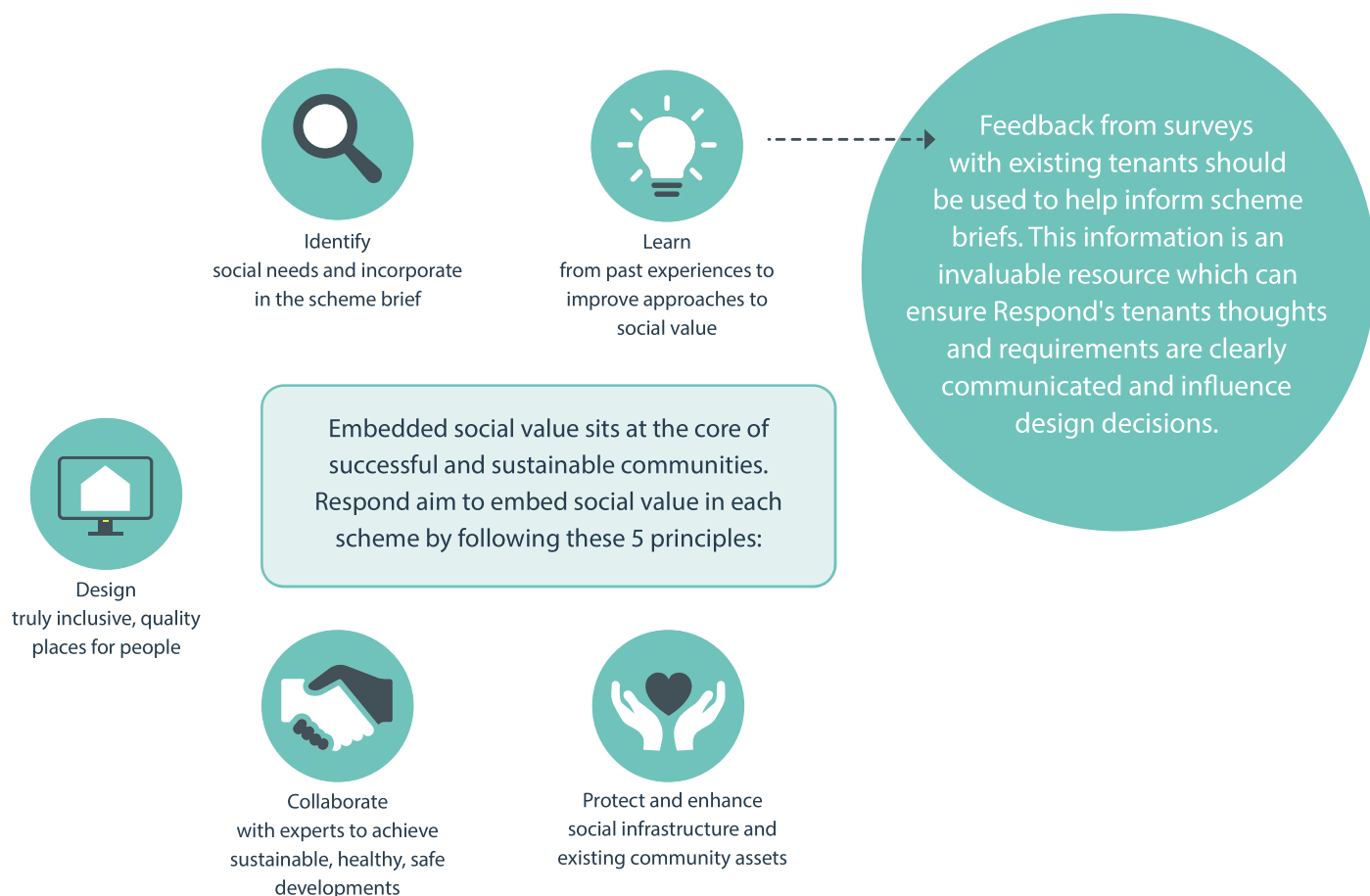


Fig.15. Six facets of sustainability
Levitt Bernstein

2. Sustainable communities

2.2. Social and economic sustainability

Sustainable communities: social value



Respond actively seek engagement with local communities to ensure greater empowerment of tenants and improve well-being through the delivery of people centric design.

Proud tenants and building users are the foundations of thriving communities; appropriate design encourages pride in places and subsequently increased sustainability through longevity of constituent design elements.



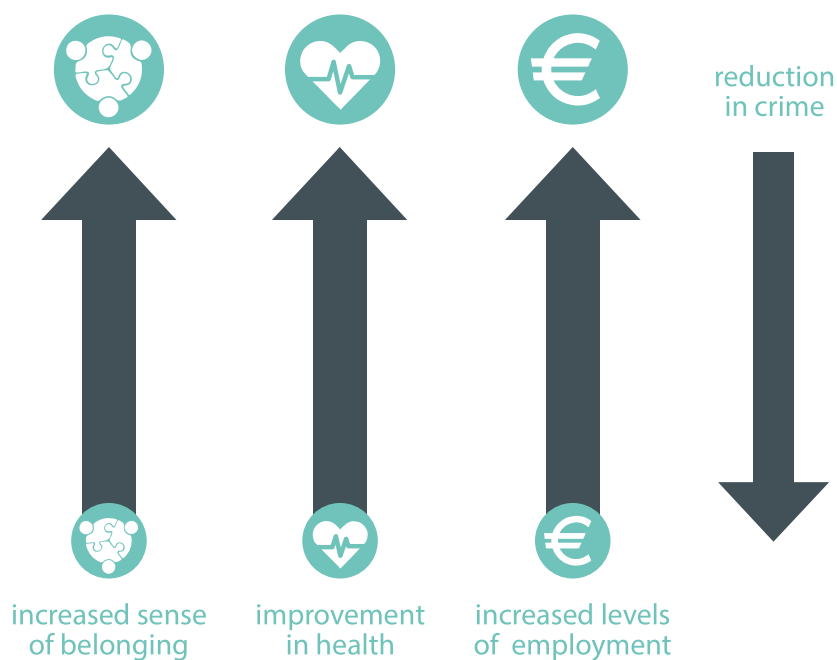
Fig.16. Empowering tenants by providing independence
Glenn na Horna, Respond



Fig.17. Community Gardening, including the community through shared activity
Lucan, Respond

2.3. Health and well-being

Benefits of embedding social value and well-being



The info-graphics above represent improvements of health, reduction of crime and increase in employment on a scheme where social value principles were embedded into the design process.

This resulted in a thriving community, which improved the lives of those tenants and those in the surrounding neighbourhood.

Respond is in partnership with the Global Brain Health Institute (GBHI), Trinity College, Dublin.

Promoting better brain health through design and specific design considerations will help tenants to live more independently and enable many to age in place. This adds to the diversity, equality and sustainable nature of communities which are being created.

Design team members should keep abreast of findings, seminars and schemes lead by Respond and the Global Brain Health Institute, who are working together to promote:

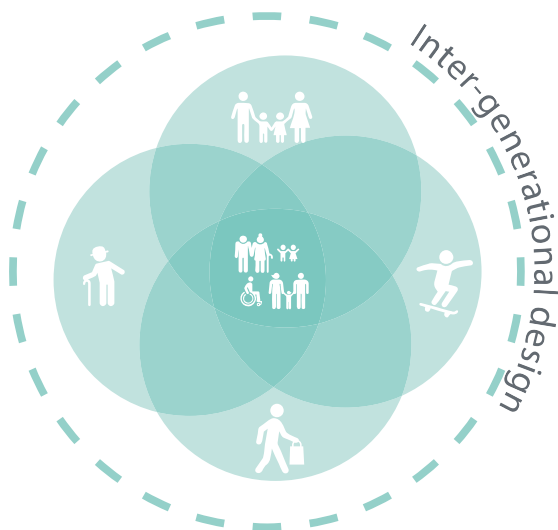
- The human perspective of brain health issues for both housing service users and providers.
- The design of housing services for an aging population in the context of ageing and dementia.
- Brain health throughout the life of a new building, and developing sustainable communities.



Fig.18. Providing activities to promote improved brain health
St John's College, Respond, Respond Design Dept

2. Sustainable communities

2.4. Flexibility and adaptability



Future-proofing and flexibility

Respond encourage design teams to consider possible future scenarios which would be needed to meet future requirements, and how can the initial design facilitate change if change becomes necessary?

Discussions regarding future-proofing techniques are encouraged at all stages. These may include designing-in flexible spaces from the outset and considering how future retrofitting and renovation may be managed.

Respond promotes thinking of buildings as potential energy generators as part of its aim to ensure affordable and sustainable development for generations to come. In addition, consideration of low running costs and maintenance costs will facilitate consistent upkeep of communal and public areas.

To future-proof schemes the following should be considered:



How spaces can be designed to be flexible/ adaptable as the population within a community ages.



How buildings and their environs can be made resilient to climate change, such as integrating sustainable drainage strategies. For any building to be energy efficient, healthy, and moisture free, there is a clear need to manage the balance of daylight, solar gain, heat, air and moisture movement throughout the life cycle of the building.



How will the building adapt to changes in legislation, including building regulations.



Reducing future energy use and ensuring schemes are affordable to run, and help keep service charges and running costs low.



Allowing infrastructure to accommodate future technology.

The NPF priorities for compact growth include an emphasis on the renewal of existing settlements, rather than continued sprawl. Respond encourages their developments to be compact in form and close to existing transportation hubs, communities and existing facilities embedding the principles of the “fifteen minute city”.



Fig.19. Childcare facilities
Hill Top Childcare, Respond



Fig.20. Older persons daycare
Nethercross Daycare, Respond



"A building lived in, is a building loved,
is a building lasting." - Brian Rich, 2014

Intergenerational design

Consideration for intergenerational design can reinforce the principle of a sustainable community.

All generations appreciate aspects of good design, such as good lighting levels, distinctive designs, control of noise and making spaces feel safe and welcoming.

Designs which provide amenity space that balances the needs of multiple user groups can also be used to encourage intergenerational integration and strengthen communities.

Ideas for intergenerational design to be considered are as follows:

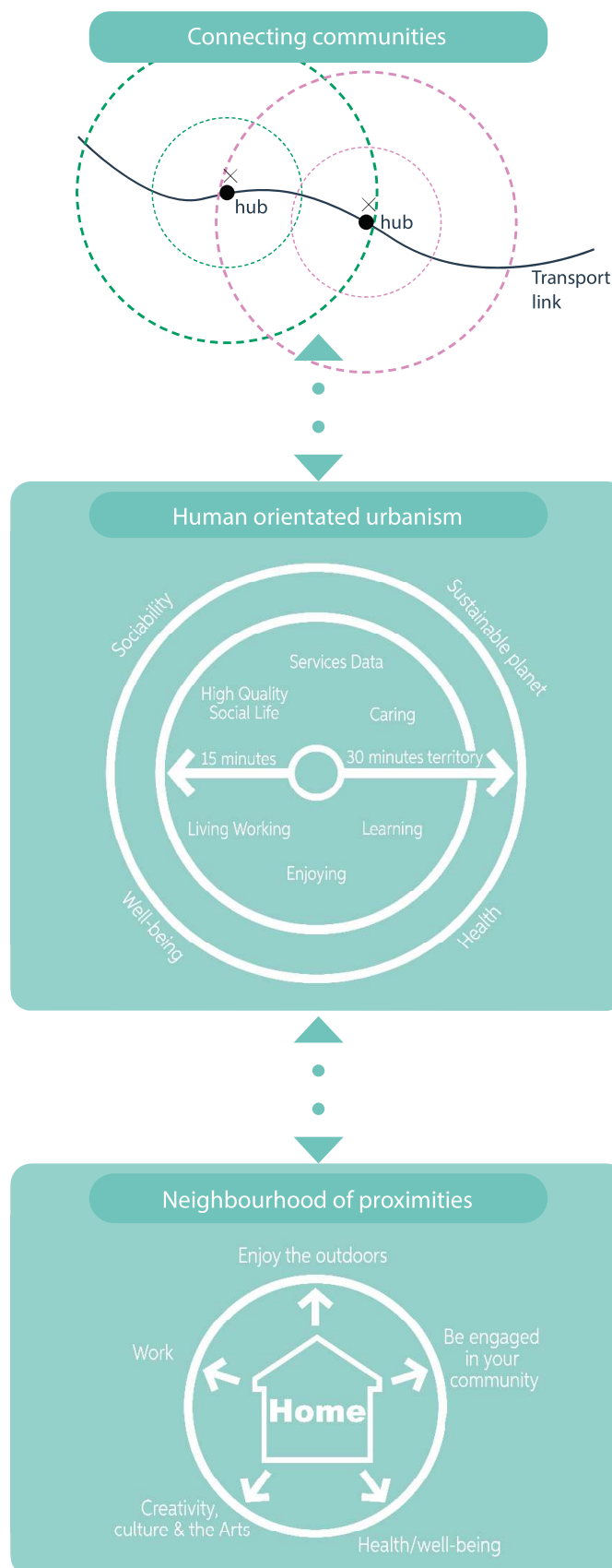


Fig.21. Respond schemes

2. Sustainable communities

2.5. Sustainable transport and movement

Creating well connected neighbourhoods with people-centric design



What is a 15 -minute city? As the name suggests, a 15 minute city (or 20 minute neighbourhood) is an urban planning concept where everything a resident needs can be accessed within a 15 minute journey.

Respond supports the concept of the 15-minute city. Professor Carlos Morenos is a visionary who has boldly re-imagined urban life, prioritizing people over vehicles. Respond supports the concept of human orientated urbanism and encourages neighbourhoods of proximities as illustrated in the graphics below.

This concept promotes a human orientated urbanism. Where residents can meet their material demands by walking 15 minutes, including living and cultural demands, usually surrounded by site boundaries with a population of 50,000 to 100,000 people.

The aim of the 15 minute city (FMC) which is an urban planning concept, is to reduce car dependency, promote healthy and sustainable living and improve well being and quality of life by introducing a neighbourhood of proximities.

Fig.22. Connecting communities
Respond

Self-sustaining communities

Principles of self-sustaining communities should be reviewed on a scheme specific basis. These will constitute a selection of the 6 social function categories listed below, and will be dependant on the local context.

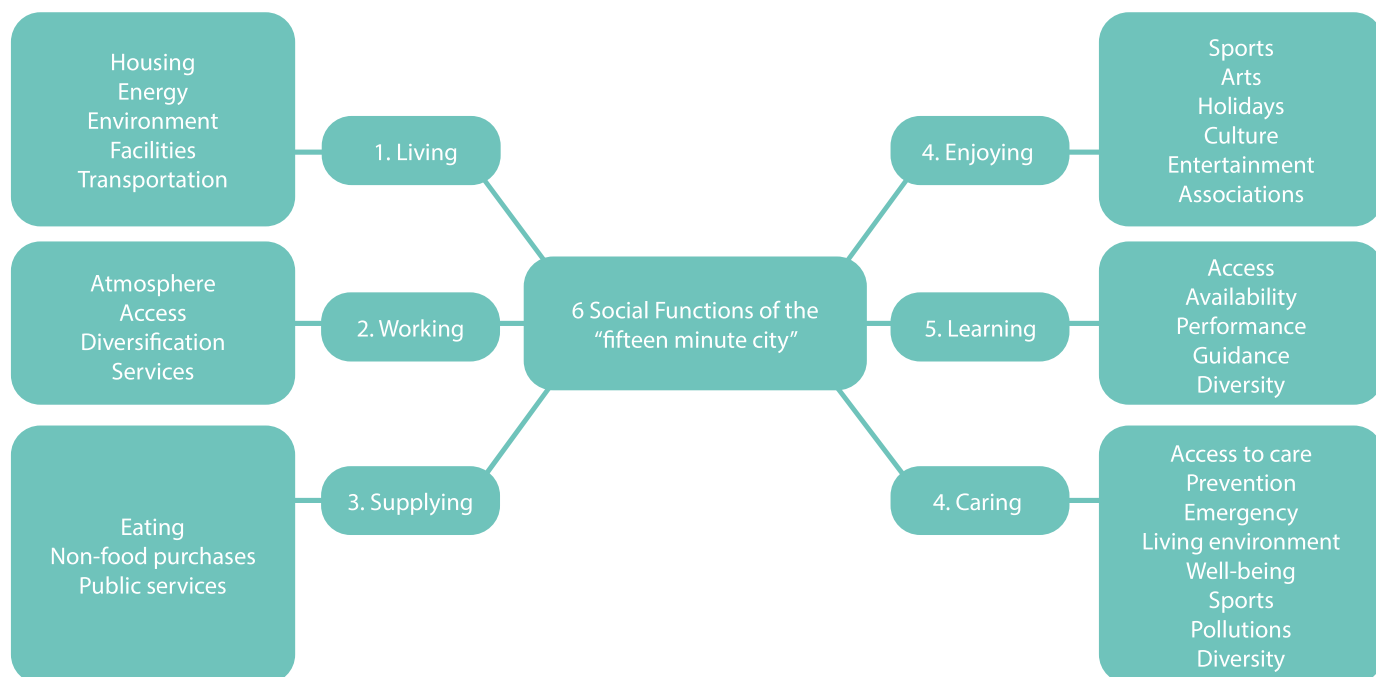


Fig.23. Six social function categories
Respond



Fig.24. Artist impression of a dense urban neighbourhood
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Fig.25. Enjoying
Airmont Community Gardens, Respond



Fig.26. Learning
Hill Top Childcare, Respond



Fig.27. Living
Corduff Road, Respond, Crawford Architecture



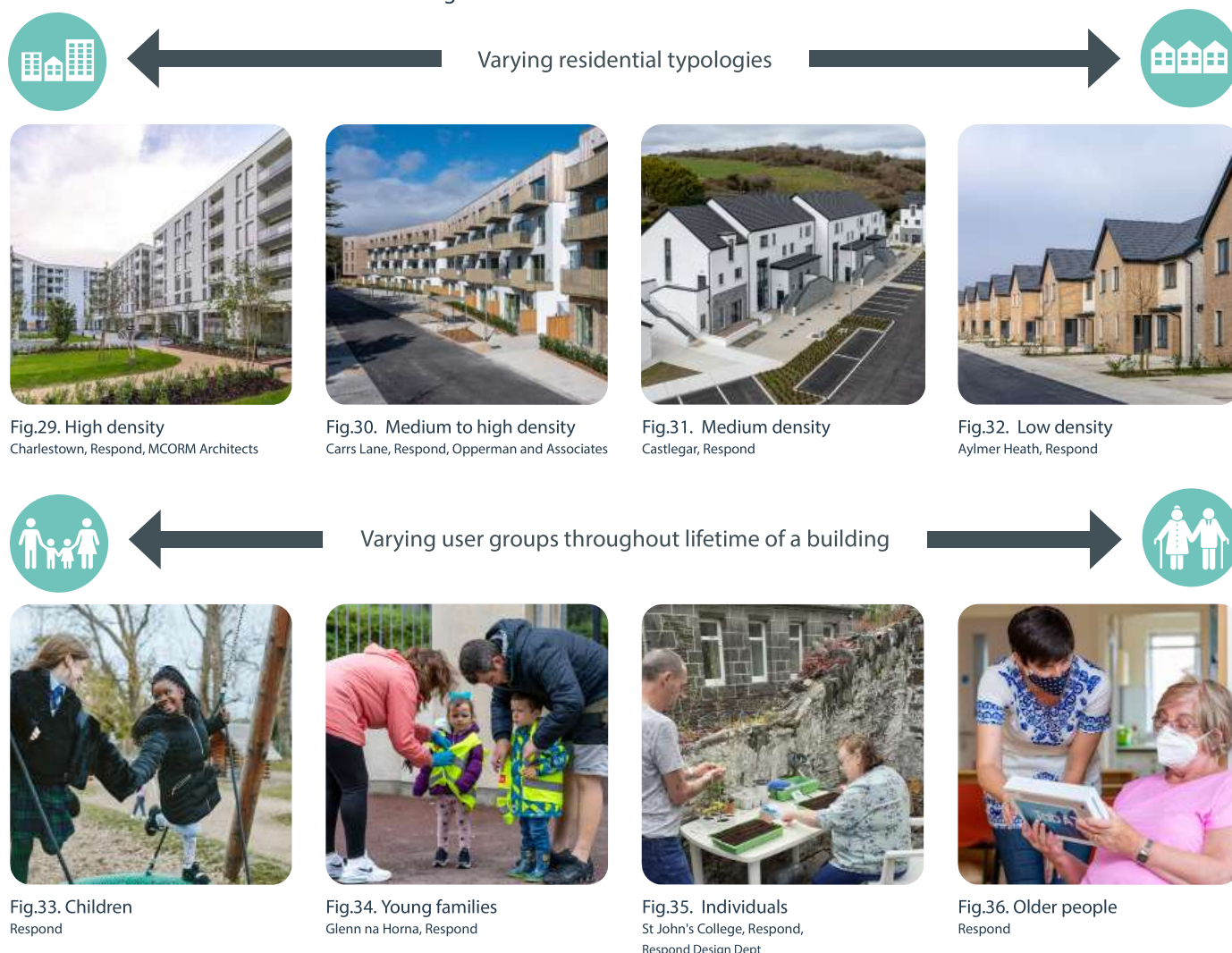
Fig.28. Caring
Nethercross older people daycare, Respond

2.6. Sustainable housing typologies, diversity and mixed communities

Varying need and adaptability

Respond are aware of the evolving diversification of our communities in terms of culture, languages and traditions. We recognise the importance of diversity and inclusion awareness in informing the best design outcome for the built environment and designs should

therefore always take into account current best practice to ensure inclusive communities can thrive. Housing mix, typologies and density should therefore be varied to respond to the location and brief requirements.



There are significant benefits to encouraging integrated communities by providing housing appropriate for a wide range of age groups. This can ensure activity within a neighbourhood throughout the day and also provide increased passive surveillance. Multigenerational communities may experience other benefits including a positive impact on mental and physical health, social inclusion and reduced loneliness, and should be adaptable to respond to changes in communities over the lifetime of a development.

A balanced mix of uses within communities can also help promote stronger networks of amenities. Ensuring amenity spaces and facilities are suitable for a wide range of uses which meet the needs of a community over time helps to future-proof developments. For instance a nursery designed to be adapted into older persons day care, or child play spaces that can be converted into spaces for gardens with benches).

“ It will change my life completely, completely. Because all I can say, is this is one of the happiest days, because I know what other people are facing, and especially in terms of accommodation. So it will really change a lot of things for me. Working with this company is so amazing, and I’m happy. ”

Repond tenant



Fig.37. Housing development
Bridle Close, Kilbarry, Repond, Fewer Harrington & Partners

2. Sustainable communities

12 Inclusive design principles for people living with dementia

These 12 principles created by the University of Chile in conjunction with the Global Brain Health Institute, Dublin, can be used as a tool for designing spaces that help people who are living with dementia.

These principles should be considered for all residential schemes (with the aim to provide lifetime homes) and also all Respond services schemes (including older people daycare centres).

More guidance on older peoples daycare centres is set out in chapter 6.



Fig.38. Viviendo con Demencias
Universidad de Chile



1. Participatory and customisable

It is crucial to consider the history and personality of the person or persons with dementia in order to design areas which reflect preferences, opinions and aspirations. This increases feelings of belonging, autonomy and avoids isolation. Participation using simple language and instructions should be used.



2. Familiar and recognisable design

Using a familiar layout with characteristics recognisable to the person with dementia will help create individuality. Consider incorporating familiar objects such as crockery, tablecloths or even a chair or piece of furniture.



3. Intuitive

It is important to create a spatial design which is clear or easy to interpret, with sufficient visual, tactile or sound cues. For example, provide open spaces without “nooks and crannies” or excess doors and dividing walls, which prevent seeing and understand the organization of space.



4. Accessible

Provide good visual and physical access to key areas of the home and retain objects linked to important memories. Consider notions of universal design. Ensure accessibility to information and space through visual, sound and tactile signals. Use ramps and handrails where appropriate.



5. Safe

Provide security measures and discreet controls. Always consider the dignity and privacy of the person with dementia. In some environments telesurveillance as part of an assistive technology (AT) strategy may be preferred. Use of information and communication technology (ICT), such as mobile phones with larger buttons for older people should be used so they can communicate remotely with ease.



9. Green or natural

Access to nature or green spaces inside and outside the house is beneficial for health and also provides an activity that the person can perform independently and safely. Plants should be provided at an accessible height (approximately 50 to 120 cm from the ground) to prevent the person from having to bend down to water or care for them.



6. Distinctive

The design should include a clear hierarchy of spaces between common and private areas. It is recommended to create different spaces for different activities to ensure that the meaning and function of these spaces are obvious and more memorable to those with dementia. Efficient separation between the living and sleeping areas should be provided. Housing must also be easy to identify as part of the wider neighbourhood.



10. Sensorially checked

Care must be taken to reduce acoustic and visual disturbances (such as excess light). Spaces should be placed away or protected from sources of noise and/or provide high levels of acoustic insulation. Indoor spaces should be able to be maintained as a comfortable temperature and must avoid extreme hot and cold conditions to cater for those sensitive to heat stress.



7. Flexible

The design and adaptation must allow for changes over time as dementia progresses. Changes can involve adaptations, greater use of assisted technology, or more simple approaches to environmental changes. For example, you can change the bedding, without intervening in the colour preference of the person with dementia, whilst respecting the colour contrast with the floor and walls.



11. Efficient

Use space efficiently removing excess objects or non-essential items, maximizing the space available to transit or perform Activities of Daily Living comfortably and independently. Also, it will be beneficial in terms energy, for example, taking advantage of the natural light during the day and use bulbs and devices of low consumption.



8. Integrated

Ideally rooms and spaces inside the house should be well connected and integrated with each other to aid ease of movement inside and outside the home. Where practical, homes should also be well connected with the environment and have access to nearby health services, parks and neighbourhood businesses.



12. Gradual

Where practical changes to the home should be applied gradually to allow the evaluation of any reactions on the behaviour of the person with dementia. Applying extensive and/or rapid changes can affect routine which is important to those suffering from dementia in order to maintain stability and good coexistence.

2. Sustainable communities

2.7. Ecology and biodiversity

Benefits of living in harmony with nature and communities



Fig.39. Considerations for ecology and biodiversity
Respond in conjunction with Ferreira Architects for EOI submission to DCC

“ From a few potted plants to a couple of square feet of grass outside your door to a plot of land now being developed into a busy garden with big ideas for the future! This Garden scheme was created by the tenants of the estate for the estate to use and hopefully in the near future to be utilised by the wider community as a place of relaxation and sense of community. ”



"First life, then spaces, then buildings - the other way around never works." - Jan Gehl

Biodiversity, well-being and SuDs

Where practical, regeneration schemes should be designed to provide benefits to neighbouring buildings and wildlife outside of the site boundary. This will encourage biodiversity and benefit tenants by ensuring proximity to green spaces and natural environments.

A sustainable approach to water management should be incorporated into each development to aid biodiversity and help inform the appropriate choice of planting and hard landscaping materials. Creating new or improved connections to existing local parks and greenways should also be considered wherever viable.

The approach should consider both current and anticipated water management needs. Approaches which include the management of rainfall on site close to the source should be incorporated where practical to help alleviate pressure on drainage networks.

Sustainable drainage best practice principles include:

- Increasing the green surface areas.
- Incorporating permeable surfaces.
- Intercepting rainwater for maintenance and plant watering.
- Including natural attenuation measures such as ponds.
- Including natural water conveyance features such as swales.
- Additional green elements (walls, roofs and vegetated river beds could be included where appropriate).



Fig.40. Diagram showing opportunity for urban greening
Respond in conjunction with Ferreira Architects for EOI submission to DCC

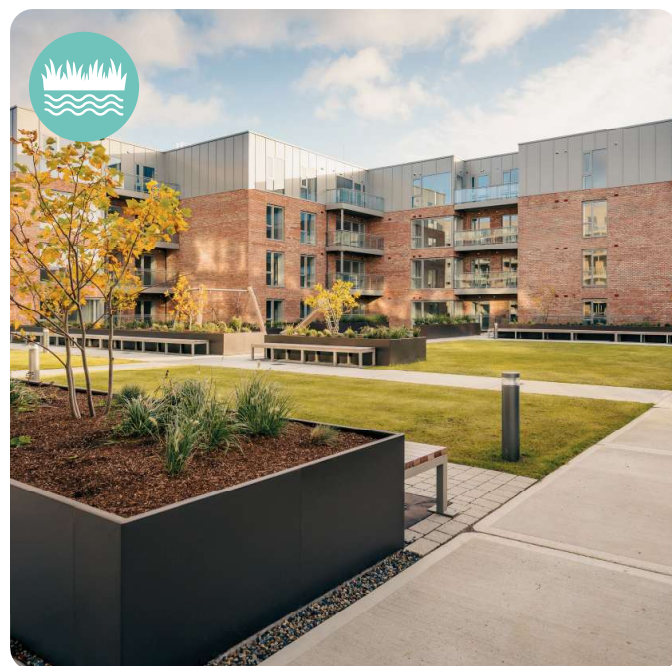


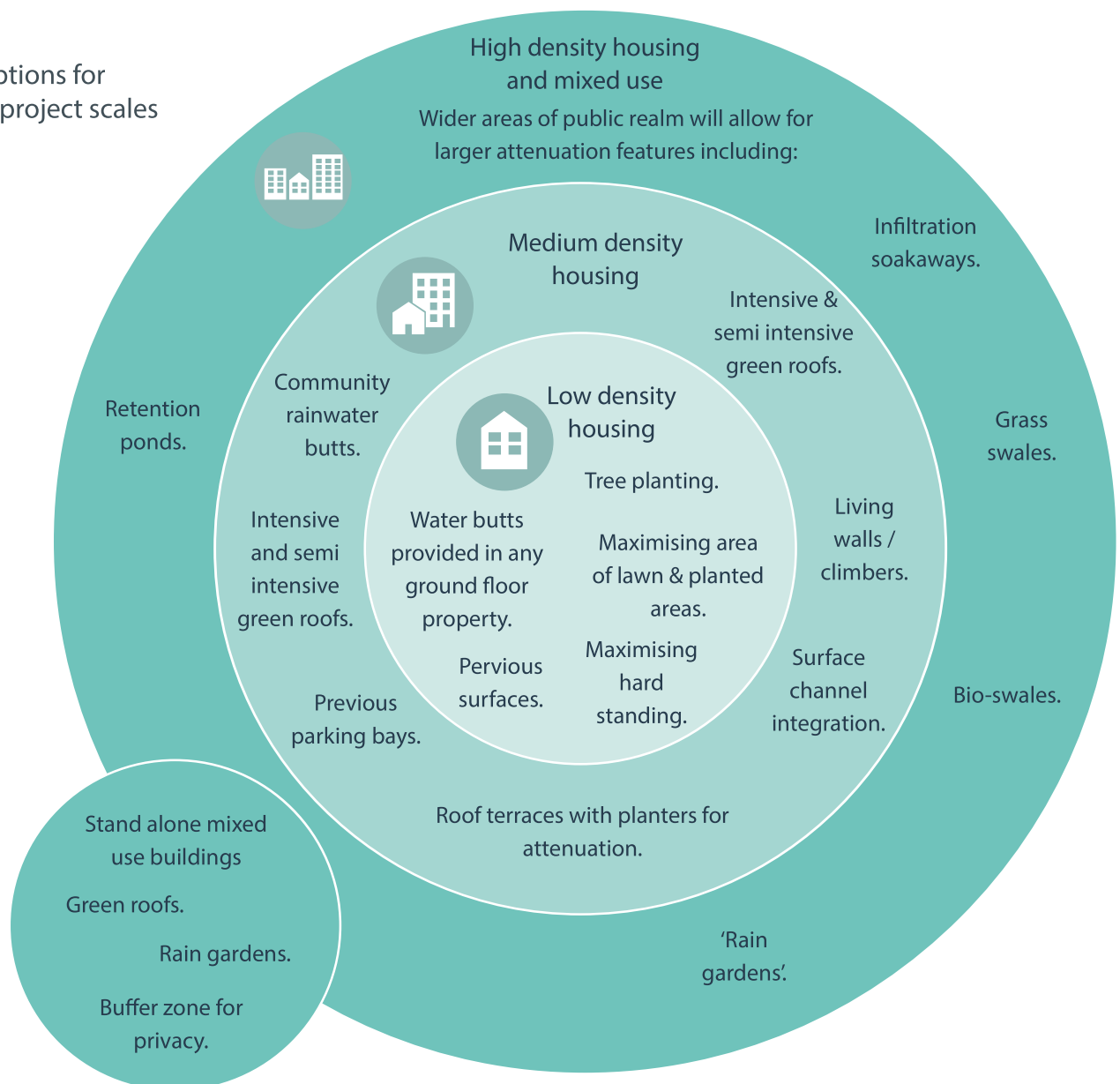
Fig.41. Biodiversity and Wellbeing
Elanora, Respond

Types of SuDS open for consideration:

- Living roofs:
 - Extensive, brown roofs, semi-intensive and intensive green roofs.
- Living walls:
 - Climbers / wiring (low cost and maintenance).
 - Modular living walls (high cost and maintenance – should be avoided).
- Retention, attenuation and conveyance:
 - Retention ponds, grass swales, bio-swales 'rain gardens', infiltration soakaways.
- Permeable surfaces filter drains:
 - Porous paving, aggregate and gravelled areas.
- Tanked systems:
 - Oversized pipes/tanks, storm cells (least sustainable option).

2. Sustainable communities

SUDs Options for varying project scales



Water harvesting

To encourage gardening, water collection points should be embedded into the design of both private and communal areas on all developments and ensure ease of access by all users.

Capture, storage and reuse of water for other uses such as flushing toilets, car washing and clothes washing should also be considered where viable, and should be able to be provided in all schemes as part of potential future retrofit works. Water reuse strategies should ensure adequate space for collection, filtration, storage and pumping.

Creating habitats and encouraging biodiversity

- Bat and bird boxes should be provided.
- Maximising biodiversity is to be encouraged in a way that does not require extensive maintenance.



Fig.42. Increased green surface and variety of habitats for wildlife
Allotments, Respond

2.8. Low carbon buildings

Respond's vision is to reduce the energy use of all of their existing buildings and implement current best practice for all new buildings. Energy consumption and costs in use impact most aspects of design.

De-carbonising homes of the future

Whole life cycle carbon assessments should be produced for all new developments to provide a full understanding of the true impact of design decisions. As part of this approach, scheme briefs should include a clear expectation of whole life cycle carbon targets which should be managed in relation to on-going assessments. This approach seeks to increase the understanding of a scheme's overall carbon impact throughout its life with the aim of reducing the amount of embodied carbon in developments over time. In addition, Respond have an ambition to move towards measuring and monitoring 'energy in use' to constantly improve and feedback into new developments.

Energy and NZEB (Nearly zero-emission buildings)

The energy strategy for all schemes must align with all relevant government policies. For all new build and retrofit schemes the energy strategy must be considered at master plan stage to assess its impact on the form of the building, area requirements, and infrastructure connections with the surrounding context.

Best practice design principles to be considered include:

- Setting clear energy targets being aspired to.
- Potential for ultra-low energy fabric design.
- Use of energy modelling to predict performance.
- Designing to achieve fossil fuel free operation.
- Maximising the installation of on-site renewables.
- Build-in retrofit opportunities to aid future-proofing.

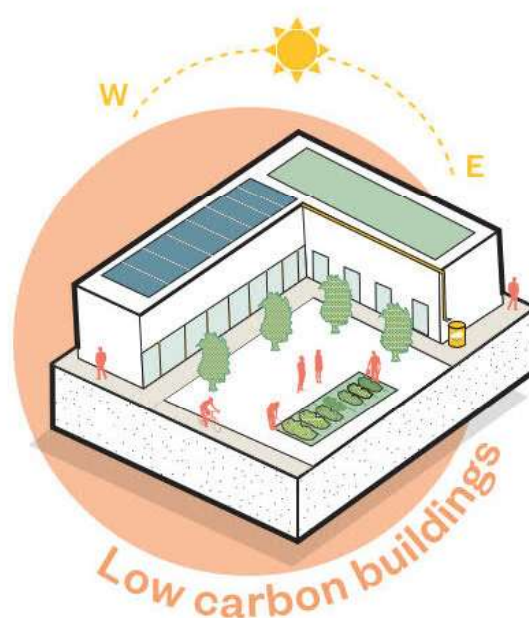


Fig.43. Sketch of low carbon building with good form factor, PV's, biodiversity and encouraging active modes of transport
Levitt Bernstein

Further measures for consideration could include:

- Use of Passivhaus or Passivhaus principles. This will impact the form of the building and size of building elements.
- Consideration of the need to balance energy conservation (heat loss and gain) against daylight penetration requirements and the impact on areas of glazing.
- Use of ecologically sensitive materials to be prioritised. All materials have an environmental impact at source, but preference should be given to products and materials with lower environmental and social impacts (including traceable sources).
- Ensuring the provision for active modes of transport is integral to the design.





3. Placemaking

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3. Placemaking



Fig.45. Artists impression of new development
Respond in conjunction with Ferreira Architects for EOI submission to DCC

“ Our scheme has given us a sense of purpose and pride of place. We weeded the entire area. We built and painted flower boxes. We planted trees and flowers. We made hanging flower baskets. Trellises were erected. Seats and tables were built. Fences and railings were painted. Bird feeders and bird houses were built. ”

Respond tenant, Killegland, Ashbourne, Meath



3.1. Introduction to place making: responsible built form

Strong principles embedded into placemaking design can facilitate the creation of spaces that support the needs, health, well-being and happiness of tenants and users.

Respond seeks to provide shared places for people to interact, relax and play - places that are critical to successful integrated communities. Providing connections to local amenities (including shops, schools and nurseries) is also essential to facilitating an active modern lifestyle. The design of new buildings and places must always be site specific and respond to local context to ensure the development of distinguishable neighbourhoods that those living within then feel more connected with.

Respond ensure their design teams work closely with Places for People – the National Policy on Architecture (2022) and Housing for All – A New Housing Plan for Ireland (HfA) 2021.

Respond take pride in ensuring they:

- Understand how people use their neighbourhoods.
- Strengthen existing communities.
- Promote public health and a clean and safe environment.
- Empower tenants by providing inclusive design.
- Understand the constraints and opportunities of the site.
- Promote sustainability by applying 'lean, green and clean' design principles.



Fig.46. Strengthening communities with gardening
Respond Community Gardens

3. Placemaking

3.2. Master planning principles: site layout and scheme design of open space and landscaping, the hierarchy of streets and spaces and access to daylight and sunlight

Best practice design considerations for social infrastructure and integration

When integrating other uses as part of a development, the following master planning principles should be considered:



Location

Is this space for local communities?
Will the wider community also have access?

Will the space benefit from a location with higher footfall?

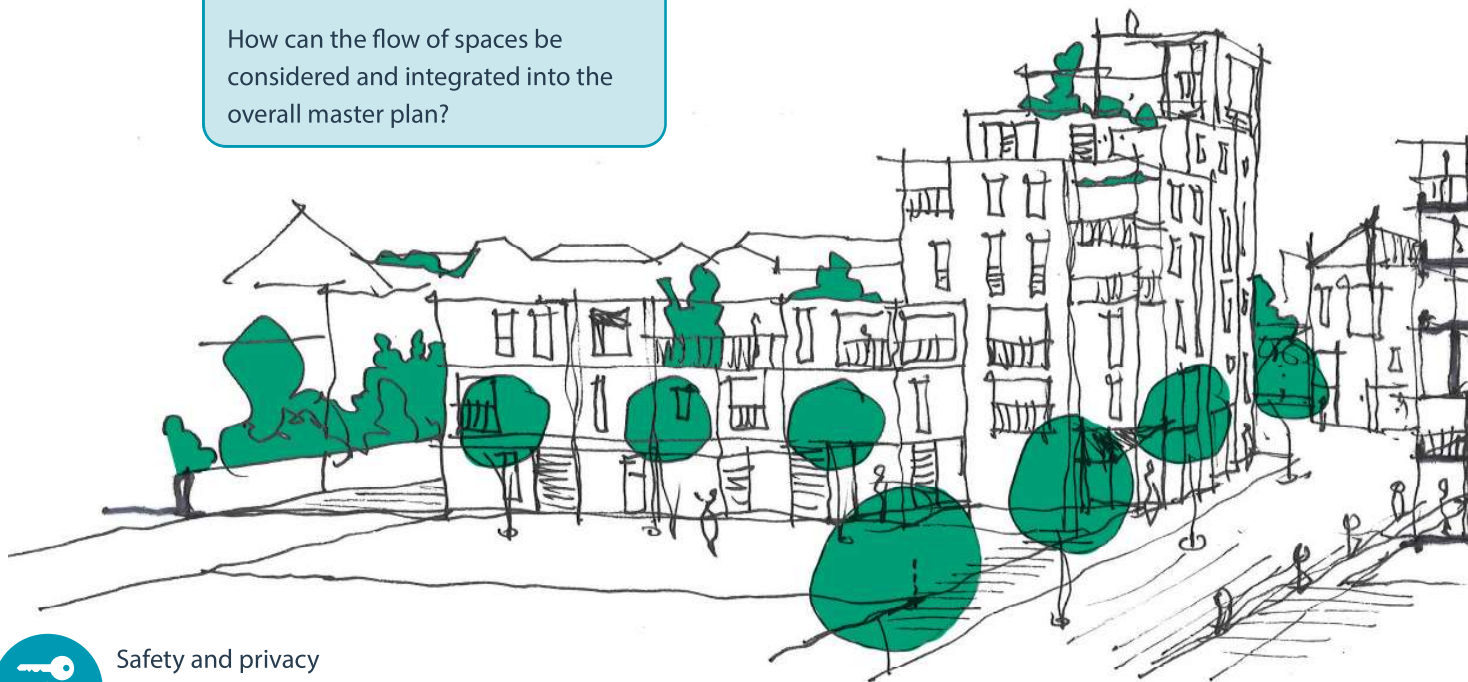
How can the flow of spaces be considered and integrated into the overall master plan?



Local heritage and context

What are the distinctive characteristics of the local heritage and context?

How can new proposals enhance the existing context?



Safety and privacy

What level of security and privacy is appropriate for the given use and user group?

Some user groups may need increased screening and privacy to feel safe and secure inside their home. Spatial planning is critical to allow for private spaces to function successfully alongside public spaces. Building frontages which promote activity and passive surveillance can be used to help reduce anti-social behaviour.



Relationship with other support services

Could the space benefit by being adjacent to other support services?

Will there be a shared communal facility to encourage wider community integration?

How can a space provide opportunities for integration to help encourage the development of relationships?

Are there any areas of public realm which can be designed to encourage social integration?



Inclusivity, diversity and accessibility

What are the user group and cultural requirements?

Are there site specific spatial, social and financial constraints that should be considered?

How can ease of access be provided by foot, on wheels, or by private or public transport?



Flexibility and future-proofing

How can the space be adapted to suit the changing needs and demands of the local community?

Can wider structural spans be considered to allow for reconfiguration of internal walls at a later date?



Fig.47. Artist impression through a varied neighbourhood
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Existing social spaces

Is it possible to emphasise the unique character of the existing space, utilising innovative designs to accommodate activities set out in the scheme brief?

Can gardening activities be added to existing social spaces to help promote social integration?



Secondary spaces

How are areas such as circulation being considered? They are key to encouraging social interaction.

// It's so close to everything like compared – like even for school and stuff. It's really close. It will only take me 15 minutes to get there now instead of an hour! //

Respond tenant, Killegland, Ashbourne, Meath



Fig.48. External Social Spaces
Elanora Court, Respond, McCrosson O'Rourke Manning Architects



Site analysis

Respond's vision is to ensure every scheme meets its full potential and maximises its opportunities within the constraints of its context. Respond aspires to refine the design of projects by continuing to assess site opportunities and constraints throughout the design process.

Key site analysis elements include:

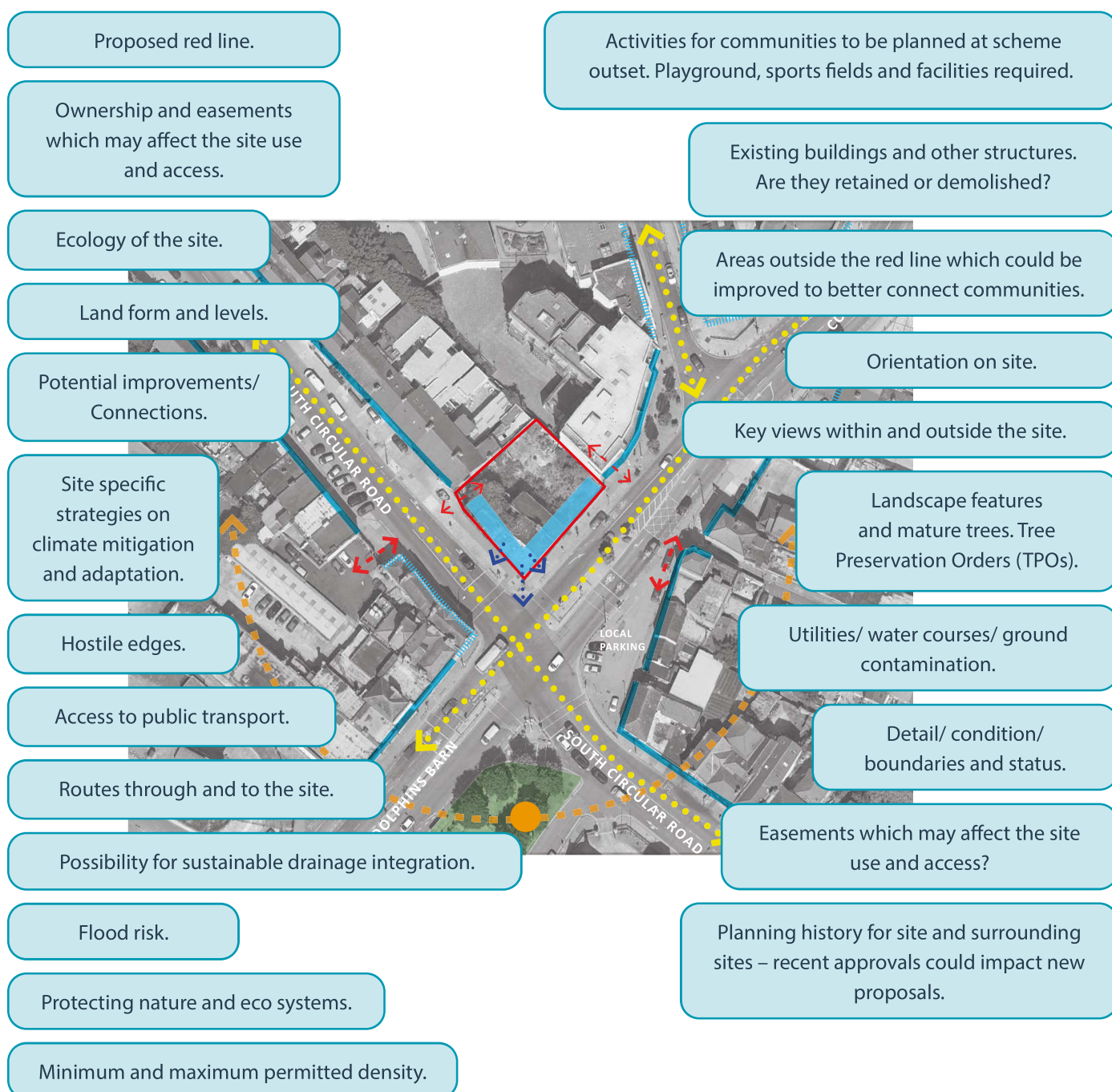


Fig.49. Example site opportunities and constraints diagram
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Public realm and open space: types and requirements



Fig.50. Sketch view of a pedestrian street
Respond in conjunction with Ferreira Architects for EOI submission to DCC

The design of public realm areas and open space can encourage a variety of different functions, including active social uses, places to relax, access to private thresholds. They can even help promote pedestrian safety and security. Well-designed public space can also encourage community engagement and public health, and promote better ecology and biodiversity within an area.

Respond's vision is to ensure the design of public spaces encourages communities to draw closer ties together by inviting passersby to stop, sit, play and connect.



Play grounds and Sports fields

can be instrumental in providing activities that are multi generational - helping to improve social interactions well being and sense of community.



Fig.52. Integrating areas for sports
Respond

Best practice design principles to be considered include:

- Understanding what type of spaces are needed in the local community and if there will be any facilities needed for visitors.
- Providing a balance of open space types.
- Every public space should be appropriate for its specific context and location. Urban and suburban communities have very different needs. The density and character of an area should be reviewed alongside the public space design.
- Intergenerational design is encouraged. Design teams should consider how the space will work over time and how it will respond to the changing needs of a community.
- Ensuring safe access to parks and open spaces.
- Considering how many children will live in the new homes, and how that may change over time.

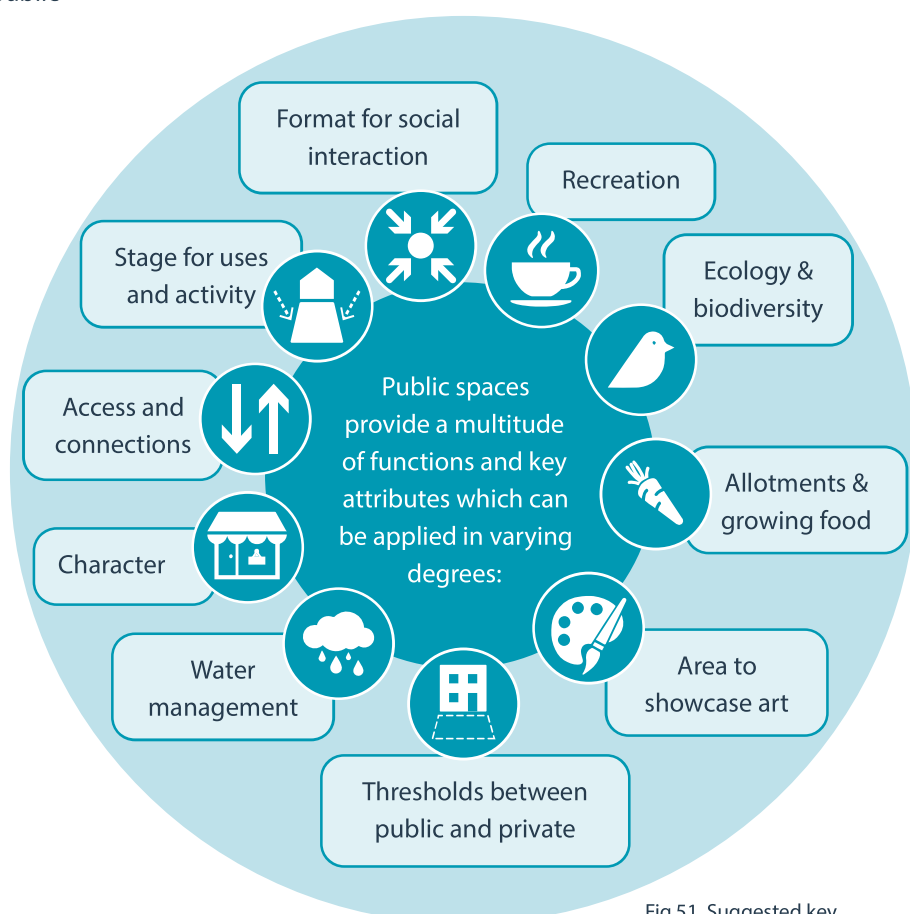
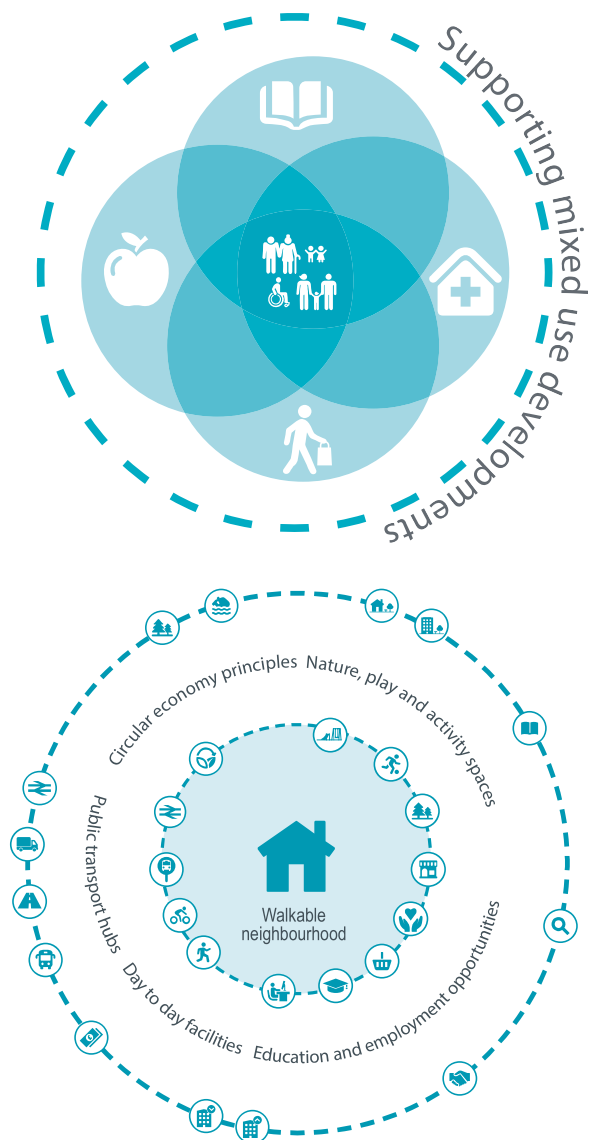


Fig.51. Suggested key attributes to public spaces



Fig.53. Scales and types of public space

Supporting mixed use developments - principles of 15 minute city



Mixed-used neighbourhoods are only sustainable when in proximity to other densely built up areas.

For example, shops within a stand alone apartment building will not survive if they do not have enough passing trade from other members of the wider community.

Larger schemes will require extra facilities and these should be taken into account when designing the scheme layout. Shopping, community hubs, recreation/playing fields, Garda Stations, libraries, etc.

Higher densities can offer significant benefits and can help ensure the success of surrounding facilities when integrated into attractive, liveable, well-designed, high quality urban places.

Best practice design principles to be considered include:

- Number of local tenants who would provide custom.
- Types of uses, and any noise, smells, traffic generated.
- Management of different uses - ideally these should be separate, but early engagement with end users is critical to understanding management impacts.

The Sustainable Residential Development and Compact Settlement Guidelines for Planning Authorities and National Planning Framework must be considered throughout the design process to help assess appropriate density levels and the right mix of uses for specific sites.

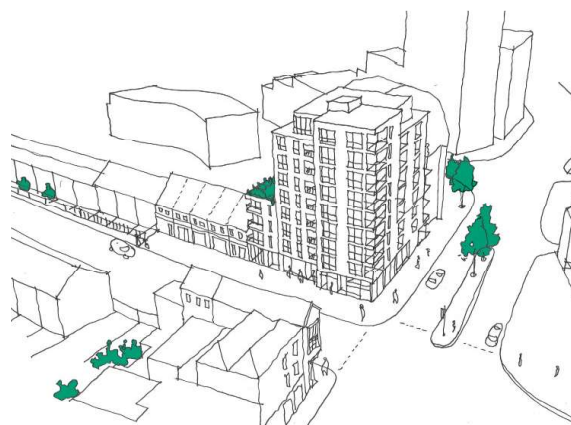


Fig.54. Mixed-use neighbourhoods in proximity to transport options
Elanora Court, Respond, McCrosson O'Rourke Manning Architects



Density

Houses will typically be more appropriate in rural and suburban contexts, whilst apartments will typically be more appropriate in town and city centre locations. Apartments will also allow higher densities and their use will typically help sustain greater number of local facilities. Higher density living will also provide greater opportunities to provide better neighbourhood amenity and facilities.



A Summary of maximum and minimum densities per hectare (net) from Sustainable Residential Development and Compact Settlements Guidelines is set out below.

Location`	Dublin / Cork	Galway / Limerick/ Waterford	Regional Growth centre	5000+pop	>1,500 pop	<1,500 pop
Centre	100- 300*	100-250	50-150	40-100	50-150	Min 25**
Urban Neighbourhood	50-250	50-200	50-150	40-100	50-150	Min 25**
Suburban/ Urban extension	40-80	35-50	35-50	30-50	35-50	Min 25**
Suburban - maximum open for consideration at 'accessible' locations	150 Max	100 max	100 Max	80 Max	100 Max	

Note: Designers ought to undertake a thorough reading of Chapter 3 of the guidelines.

*There is a General Presumption against densities of >300, but >300 is open for consideration

**Reflecting existing density and/ or Min 25

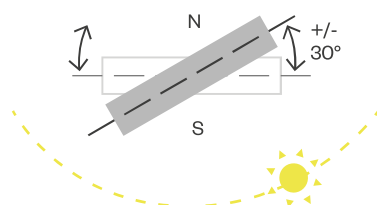
Fig.55. Consideration of residential density

3. Placemaking

Building form, massing and orientation

Shaping a new neighbourhood and orientating the appropriate housing typologies and building forms on a site will impact both internal and external spaces and how they are used by occupants and the wider community.

Best practice requires early stage review of building, topography, orientation, spacing and street proportions. Consideration of over-shading of streets and buildings, space for planting and trees, integration of swales and parking is also essential.



Prioritise dual aspect, south-facing homes. Overheating risk increases proportionally as the building faces away from due south. Anything beyond +/- 30° is no longer a south-facing façade.

For all types of neighbourhoods, variation in building scales can be used to help define character and facilitate wayfinding. This can be achieved by using different building heights or introducing breaks in massing to frame key views. When considering the form of any building, character and efficiency need to be considered holistically. For instance a simple building form may be more efficient but may not be suitable in terms of its contribution to the character of the surrounding area.

Back to back distances between windows in new developments should reflect the context of a site. Typically they must be more than 16m but ideally no more than 22m. Thoughtful orientation and configuration of windows will be needed for any distance less than 16m, as set out within the Sustainable Residential Development and Compact Settlement Guidelines for Planning Authorities.

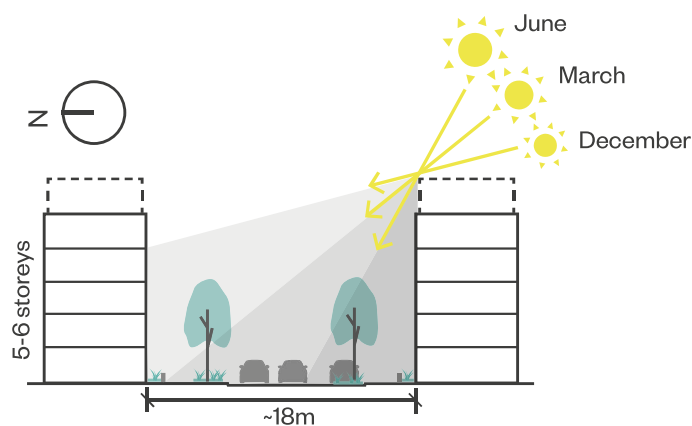
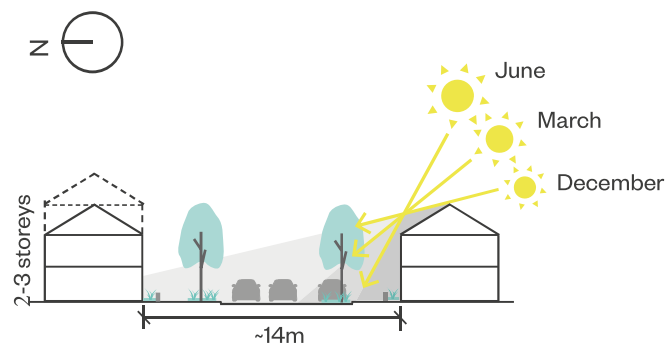


Fig.56. Varying densities and the impact of overshadowing
Levitt Bernstein

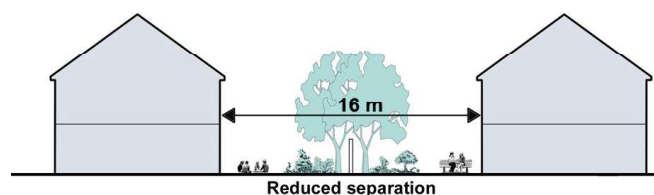


Fig.57. Diagram demonstrating Specific Planning Policy Requirements SPPR 1 from the Sustainable Residential Developments and Compact Settlements publication
Respond



For higher density housing schemes best practice principles for massing include:

1. Orientate buildings on a north-south axis so that more homes can receive sunlight.

2. Provide breaks in buildings to allow sunlight to enter courtyards.

3. Locate taller buildings so that they have minimal over-shading impact on neighbouring blocks.

4. Consider the over-shading impacts at different times of day and year for buildings and amenity both inside and outside the site boundary.

5. Consider space required in street widths including: parking, trees and planting, front gardens, street furniture, swales and dual or single carriageways.

6. Set back the tops of buildings and consider the modelling of roofscapes to bring in light to courtyards and streets.

7. Consider prevailing wind direction, which is from the south-west in Ireland. Use planting and buildings to disperse wind, and reduce the effects of wind tunnelling down streets.

8. Allow areas for mechanical and electrical plant at early design stages, focusing on best locations for more sustainable options. Stairs needed for roof access should also be considered in early massing studies.

Note: Ground floor plant can be easier to maintain but can result in reduced areas of active frontages. Limited areas of ground floor plant can be provided so long as the master plan ensures adequate passive surveillance at ground floor level.

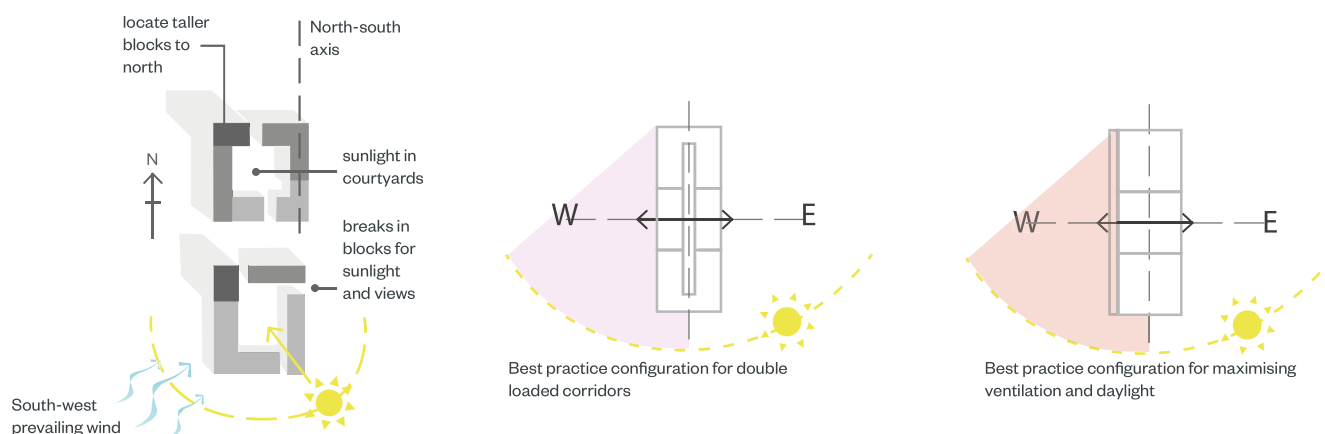


Fig.58. Apartment building orientation and configuration considerations
Levitt Bernstein

Taller buildings should be placed in areas that will reduce over-shading to other homes and external spaces such as communal gardens or public squares. This often means locating taller buildings to the north where possible.

Dual aspect apartments should be maximized to optimize internal daylight and natural cross ventilation and reduce energy use for lighting and ventilation. In addition natural light to corridors is preferable.

For buildings over eight storeys, consider the down draughts created when wind hits the facade, pushing air to the ground. Strong winds from buildings can affect the use of ground level spaces and its suitability for different activities such as sitting, standing and walking. This is especially important if external areas are created for cafe seating for example.

Approach to building design and architectural style

Developing a strong sense of character within areas of a neighbourhood can help define the identity of a neighbourhood, encouraging tenants to connect and take ownership of areas that have been designed with them in mind.

Best practice design principles to be considered include:

- Promote quality as a key design principle.
- Develop a sense of quality for tenants to be proud of.
- Develop a recognisable character for new areas which compliments and enhances the wider context.
- Ensure strong character areas are formed and relate directly to the master plan and surrounding context. The principles of master planning, architecture and landscape should all be developed simultaneously.



Fig.59. Artists impression showing clearly identifiable apartment buildings
Bannow Road, Respond in conjunction with Ferreira Architects for EOI submission to DCC



Key principles which can inform the character areas include:



Fig.60. Sketch view of residential street
Charlestown, Respond mixed use scheme, MCORM Architects

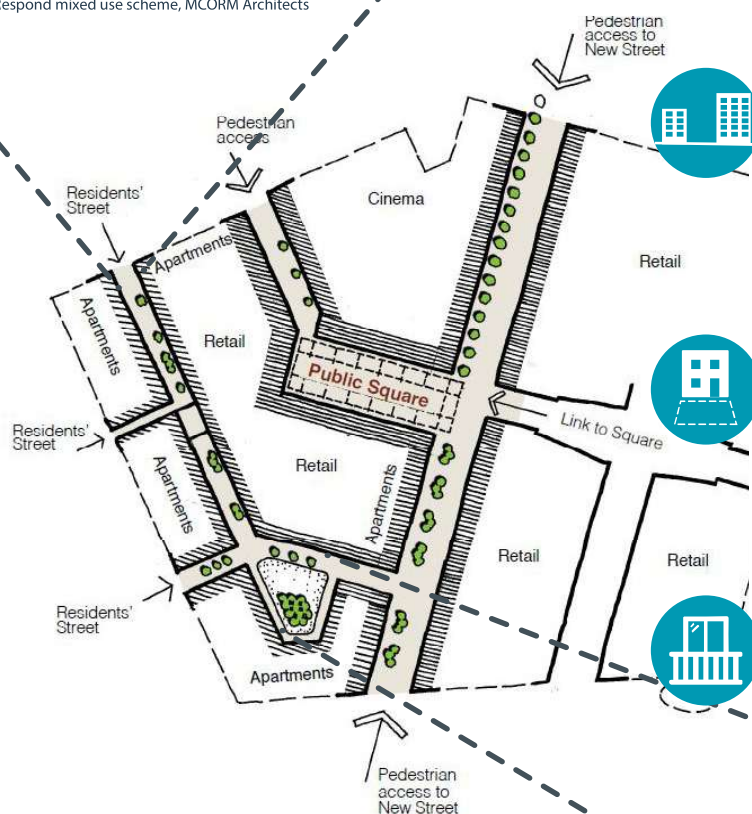


Fig.61. Master plan highlighting change of use
Charlestown, Respond mixed use project, MCORM Architects

Building typologies and uses



Form.



Use.



Materiality.

Street types and uses



Widths.

Parking.

Uses and integrated landscaping.

Thresholds



Where they are.

How they are used.

Level of privacy they provide.

Private amenity provision



Providing quality usable amenity space which responds to environmental factors, privacy and visual amenity.

Landscape design



Routes/ requirements/ types of landscaping.

Specification of hard and soft landscaping.

Markers and wayfinding features.

Formal and informal.



Fig.62. Sketch view of residential square
Charlestown, Respond mixed use project, MCORM Architects

3.3. Defining character areas: mix of land uses, vibrant centres and communities

Building typologies and use

Form



Following reviews of the scale and massing of a master plan, more detailed articulation of building forms must be considered in relation to the height, scale and boundaries of the surrounding context and character areas.

Building elements which will inform the detailed articulation of any building include:

Building proportion and composition strategies



- Set out the rhythm of bays forming a street or building.
- Create a comfortable environment which is of a human scale.
- Agree key points where the introduction of breaks in the massing/architecture is appropriate.
- Consider both vertical and horizontal proportions.

Roof Articulation (Set-backs and parapets)



- Use prominent roof shapes (including pitched roofs) to emphasise key corners/landmarks in a scheme.
- Use parapets to help balance proportions on elevations and provide roof guarding.
- Introduce set-back top floors to improve privacy and reduce the visual impact of buildings from street level.

Special moments



- Define key moments on the building form such as:
 - Recessed entrances.
 - Under-crofts.
 - Linking stairs.

Fenestration strategies



- Proportion of windows should be reviewed in relation to building proportions.
- Consider larger windows to lower levels.

Balcony strategies



- Balconies should consider orientation, building height, views, privacy requirements, wind factors, daylight, noise, comfort and usability.
- Consideration should be given to balconies which are fully recessed into the building, particularly where additional privacy and/or shade is desirable such as on southern elevations and where balconies face busy streets.
- Consider areas where a larger balcony may help balance the visual approach of the building, such as visually lighting corners, with the added benefit of more amenity space for tenants.

Respond have a preference for semi-recessed or inboard balconies which allow for better protection from the elements, particularly in tall buildings.

Deck access strategies

- Where provided, deck access should be carefully detailed. Where practical deck access spaces should promote social integration by providing informal spaces to meet neighbours whilst maintaining appropriate privacy near windows and doors.



Use



Variations in use should be made visible with physical attributes to aid legibility across larger schemes.

Where schemes feature multiple uses within one building distinctive articulation should express changes in use along principle frontages.



Fig.63. Consideration of deck access to homes
Mariners Way Rush, Respond Residential project, Darmody Architecture

Highlighting change of use with distinctive features:



Fig.65. Distinguishing ground floor uses with scale and material
Acton Gardens, Levitt Bernstein mixed use project



Changes in material.



Individual front doors.



Double-height space.



Recesses or canopies.



Signage, wayfinding and lighting.

Materials

Character areas can be defined by the use of materials and detailing.

Complementing materials should be used to reduce sharp changes in character and typically no more than three principle facade materials should be used in any one elevation.

Review of the environmental properties of building materials should be carried out at all design stages to encourage specifying sustainable material options.

Additional visual clues such as changing material types can help with wayfinding for the visually impaired.



Fig.64. Highlighting other uses with canopies and signage
Respond in conjunction with Ferreira Architects for EOI submission to DCC

3. Placemaking

Streets types

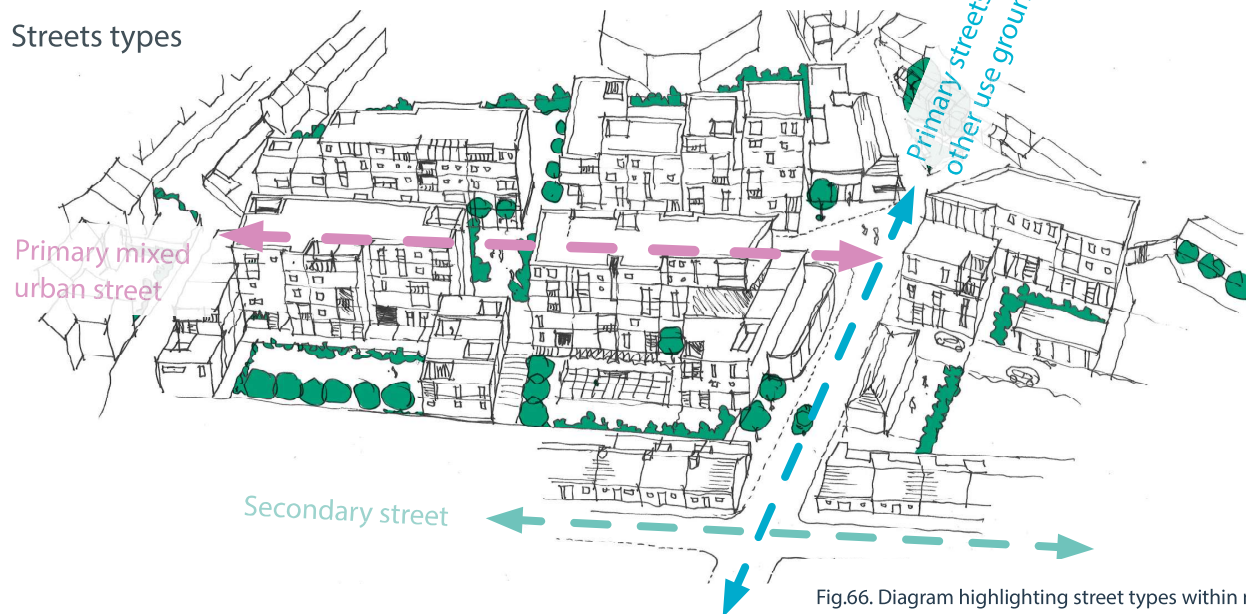


Fig.66. Diagram highlighting street types within master plan
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Reviewing the hierarchy of streets within a master plan will help to manage the flow of traffic and footfall and required activities. As such, integration of road layout and infrastructure design is essential at early stages of design.

Street widths should be designed to reflect their role within the street hierarchy of the surrounding neighbourhood, and should reflect the character of the surrounding area, orientation of buildings.

Road widths and vehicle tracking should be reviewed by a transport consultant and approved by local authorities/ service providers including emergency services and refuse collection providers.

The street type diagrams on the following pages provide guidance on typical street design but should be used as a starting point and adjusted to suit site specific conditions.

Best practice principles to be considered:

- Incorporating wide footpaths throughout will reinforce a pedestrian first approach.
- Where appropriate Respond encourage two way cycle routes on one way roads to encourage active travel.
- Where parking is located on one side of the road, consider locating parking on shadier side of the road.
- Crossing points for emergency and refuse services should be incorporated as required.
- Drop kerbs for in curtilage parking and refuse collection should be considered.

Indicative minimum widths of street components:

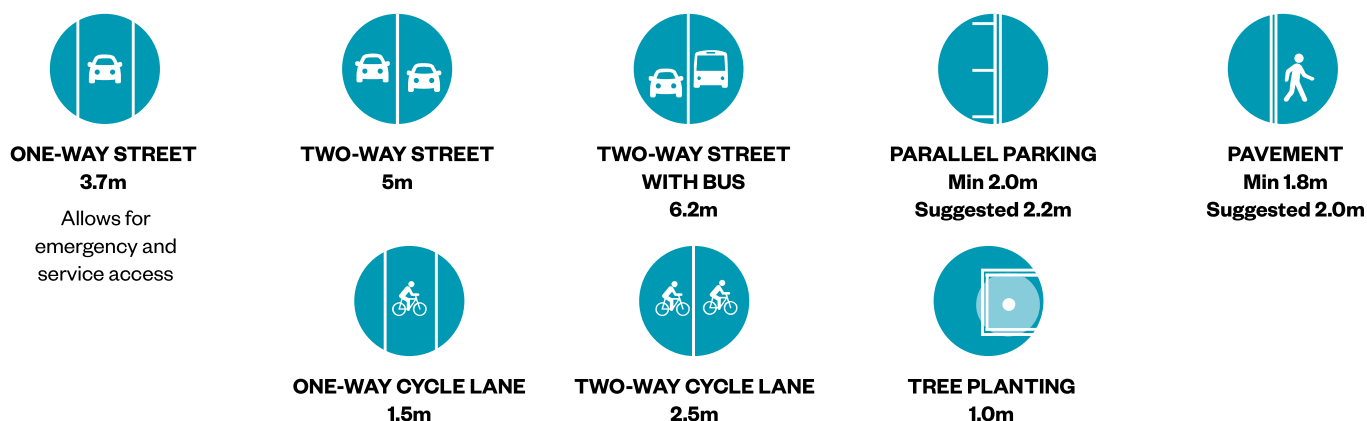


Fig.67. Indicative width of street components, to be reviewed along side DMURS



Primary mixed urban streets

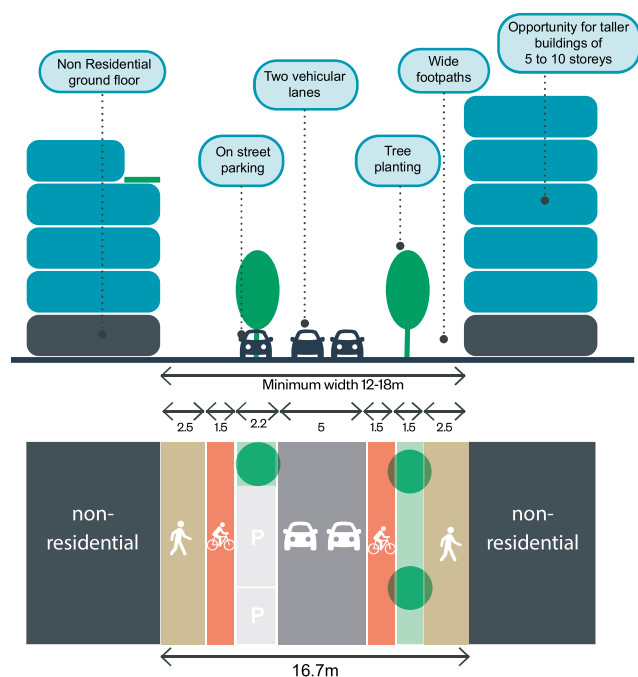


Fig.68. Diagram suggesting considerations for a primary mixed urban street

Key characteristics:

- Large scale with opportunity for taller buildings of 10 storeys or more.
- Non-residential ground floor.
- Key vehicular route.
- Wide two-way carriageway or more lanes.
- Generous foot paths and cycle lanes.
- Tree planting and landscape interventions.

Traffic calming:

- Incorporating pedestrian crossings and/or traffic lights where required.
- Locally restricting lane widths.
- Integrating entry points and gateways.
- Speed cushions.

Primary streets with other use ground floor

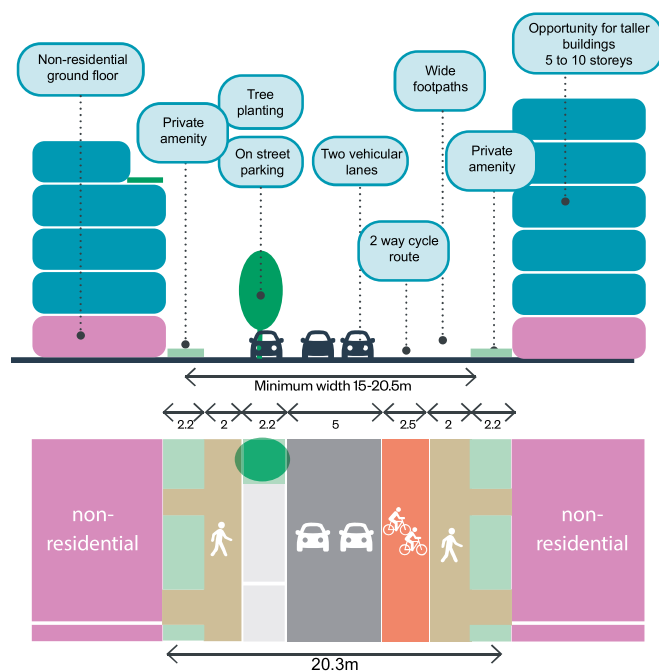


Fig.69. Diagram suggesting considerations for a primary street with other-use ground floor

Key characteristics:

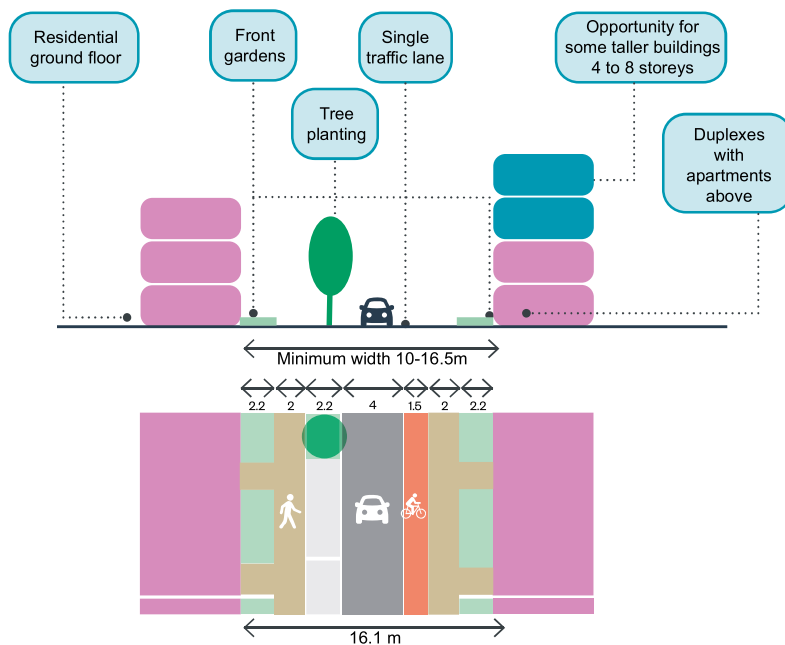
- Large scale with opportunity for taller buildings of 10 storeys or more.
- Key vehicular route.
- Wide two-way carriageway.
- Generous foot paths and cycle lanes.
- Tree planting and landscape interventions.

Traffic calming:

- Large scale with opportunity for taller buildings of 10 storeys or more.
- Key vehicular route.
- Wide two-lane carriageway.
- Generous footpaths and cycle lanes.
- Tree planting and landscape interventions.

3. Placemaking

Secondary streets



Key characteristics:

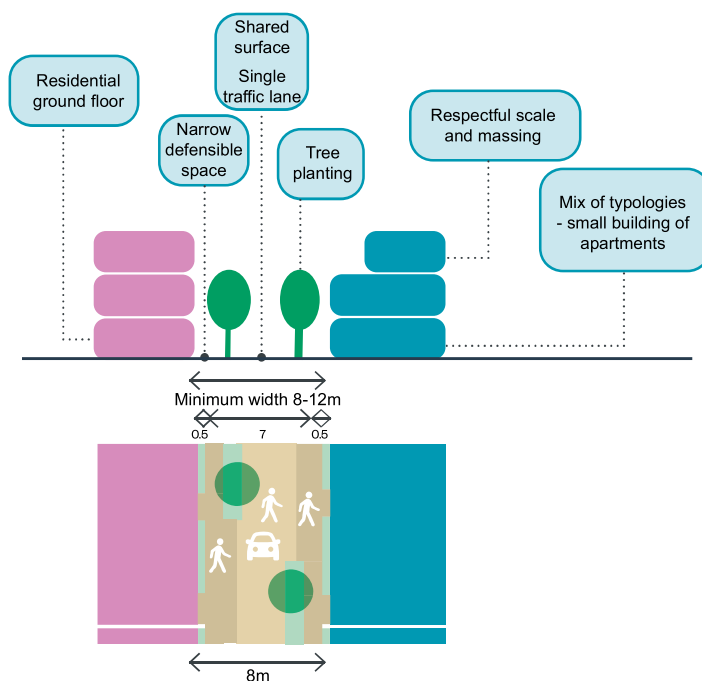
- Medium scale, street with medium rise buildings of 3-8 storeys.
- Typically residential uses and small shops.
- Integral to pedestrian and vehicular movement.

Traffic calming:

- One-way road helps with traffic calming.
- Parking can be located on alternate sides of the road to integrate a chicanes.

Fig.70. Diagram suggesting considerations for secondary streets

Tertiary streets



Key characteristics:

- Intimate scale, pedestrian priority, low rise buildings of 2-4 storeys with street tree planting.
- Residential ground floor.
- Shared surface/ pedestrianised or single traffic lane.
- No parking.

Traffic calming:

- 1m wide zone for integrated tree pits/ planting to support traffic calming.

Fig.71. Diagram suggesting considerations for tertiary streets



Fig.72. Defined character areas
 Prepared in conjunction with Ferreira Architects for EOI submission

Landscape



Fig.74. Sketch of interactive landscape areas
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Thoughtful landscaping offers an opportunity to stitch communities and neighbourhoods together. The landscape design provides a number of key functional areas required for everyday navigation, and function of a scheme. The composition of these areas are also essential in establishing the character of a scheme.

Best practice design principles to be considered include:

- Creating a balance between amenity requirements and biodiversity aspects.
- Ensuring accessibility for all.
- Providing a strong narrative for greening. It presents an opportunity to provide recollection of other space and places, through sight, smell and touch.
- Ensuring the landscape design reinforces the existing character of the wider area, such as is the landscape character formal or informal?

Schemes should try to incorporate the following key principles:

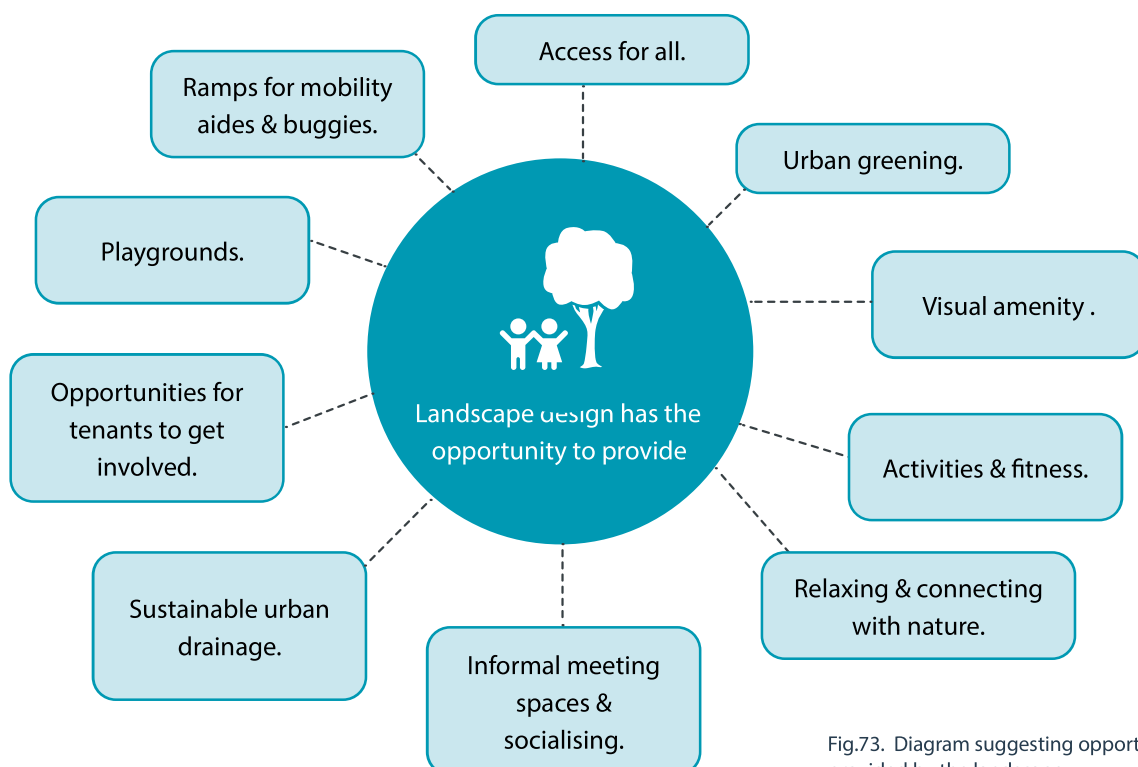


Fig.73. Diagram suggesting opportunities provided by the landscape.



Reinforce connections and boundaries

Due to its connective nature, well designed landscape can invite tenants and passersby towards key gateways and entrances. These key areas reinforce social inclusion and integration within a community and should maximize views and be open and inviting.

Areas where privacy needs to be increased should be considered, such as, next to private entrances or homes with ground floor bedrooms. Additional screening or taller planting should be considered in these locations.



Consider maintenance

There is proven correlation between areas with more trees planted and improved well-being. Design teams are therefore encouraged to explore how greenery can be incorporated into all schemes. This approach must also be balanced against maintenance requirements and design teams should carry out early engagement with Respond's asset management teams to agree the most beneficial approach.

Fig.75. Respond allotments and greening strategy
Respond

A range of types of external spaces may be required as part of the layout of public, semi-private and private spaces within a scheme. Individual requirements of each scheme will vary, however the following considerations should be considered on each scheme:

- Sequence of spaces.
- Desired formality or informality of space.
- Level of visual accessibility; open and inviting or sheltered and private.
- Accessibility for all.
- Acoustic environment.
- Services to be provided for utilities.
- Integration of art.

3. Placemaking

Considerations for residential landscaping

Private	Area	Considerations
	1. Front gardens (houses). 2. Back gardens (houses). 3. Balconies (apartments). 4. Front terraces (apartments).	1. Inviting. 2. Secure and protected. 3. Balance privacy and light. 4. Accessible.
Communal 	1. Gated courtyard. 2. Roof terrace. 3. Community gardens.	1. Use to bolster a sense of community. 2. Improves access to visual amenity. 3. Community gardens can help reduce food poverty and insecurity. Respond promotes integration of schemes with local services to connect with the local community.
Public open space 	1. Shared space in front of shared Residential entrance. 2. Public square. 3. Town green. 4. Meadow.	1. Promote inter-generational interaction 2. & 3. Provide important physical connections. 3. & 4. Promote connections to nature to improve well-being and biodiversity.
Play 	1. Doorstep play. 2. Incidental play. 3. Integrated play.	1. Should be accessible to children of all abilities. Level access and play for children in wheelchairs is essential. 2. Located in close proximity to new homes and ensure play areas are well overlooked. 3. Ensure landscape encourages distinct spaces for play and other uses such as quiet seating areas. Maximize play by making the landscape 'playable'.
Landlord areas 	1. Green roofs. 2. Additional areas of greening not appropriate for use by tenant.	1. & 2. Green roofs should be considered for apartment buildings, but should generally be avoided for houses unless easily maintainable. Review in conjunction with PV's and any fire safety requirements.

Fig.76. Considerations for residential landscaping



Tenants Gardens



Fig.77. Familiar plants
Residential gardens, Respond



Fig.78. Plants chosen by tenants
Community garden, Respond

Respond advocate giving tenants choices. Simple design choices should be based on individual tenant responses such as whether or not they want a tree in their garden. An allowance for the tree of their choice within the cost plan should be considered.

Best practice design principles to be considered include:



The pros and cons of planting trees which can be climbed – discuss preferences with tenants in advance.



Introduce fruit and nut trees as these help promote community interaction.



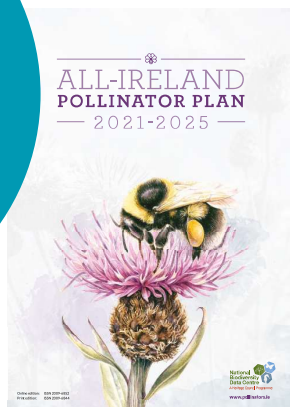
Locations for re-wilding should be considered. They can be beneficial when rationalised within the overall master plan. (All-Ireland Pollinator Plan provides additional information on how to help pollinators survive and thrive. <https://pollinators.ie/>).



Non-native invasive plants are becoming an increasing issue. They can impact on local biodiversity due to their aggressive growth. Most commonly, Japanese knotweed is a key concern. Some simple measure can help prevent the spread of invasive species, including;

- Early risk assessments.
- Raising awareness of invasive species.
- Develop strategies to prevent spread.

The inclusion of native species is encouraged as they can evoke memories through sight, smell and even the sound of plants outdoors. Plants should be suitable for the local climate and orientation for each site.



Space standards

- Minimum Private Open Space standards should be reviewed in line with the Sustainable and Residential Development and Compact Settlement Guidelines.
- Respond encourage design teams to apply a balanced and flexible approach by considering provision both private and semi-private spaces, ensuring the best possible external amenity within the site specific context.

3. Placemaking

Active frontages and thresholds

Active frontages are those which promote activity at street level through the use of entrances to homes and other uses. Location of entrances should be considered in relation to the master plan design, sequence of spaces and movement and should promote connections between external landscape areas and internal spaces. The design of thresholds marking the transition between public and private or semi-private space should be clear and legible to aid wayfinding.



Fig.79. Varying Threshold
Brindle Close, Kilbarry, Respond

Active frontages

Active frontages create overlooking, natural surveillance and help promote safer public spaces.

Best practice principles include:

- Street access doors to all ground floor properties.
- All ground floor buildings should have a kitchen or living room overlooking the public realm.
- Inactive frontage should be avoided where possible. Where unavoidable they should be limited.

Boundary treatments

Boundary treatments add considerably to the character of an area and should be considered alongside proposed street type and width. Requirements for turning spaces for prams and wheelchairs in front of entrance doors should be easy to use and met without obstruction to ensure accessibility for all.



Fig.80. Active residential thresholds that maximise glazing
Cornamona, PKA Architects for DCC



Fig.81. Boundary treatments adding character to the area
Beechpark, Respond, Donnelly Turpin Architects



Residential thresholds



Fig.82. Residential Threshold considering access for all and car parking
Brindle Close, Kilbarry, Respond



Fig.83. Threshold between homes and access walkways
Brindle Close, Kilbarry, Respond



Fig.84. Threshold between homes and shared amenities
Brindle Close, Kilbarry, Respond

Priority should be given to understanding how the tenants will use their external spaces

Orientation and the distribution of landscaped areas throughout a master plan is important to maximise sunlight.

Designers are encouraged to consider questions relating to how tenants use their space e.g. "Can the design facilitate tenants to have a cup of morning coffee in the sun and dinner in the garden in the afternoon?". This may add to the character of the surrounding street and generate a more distinctive character.

All Respond tenants are responsible for maintaining their gardens. Garden design must facilitate ease of upkeep for a range of abilities and interest in gardening.

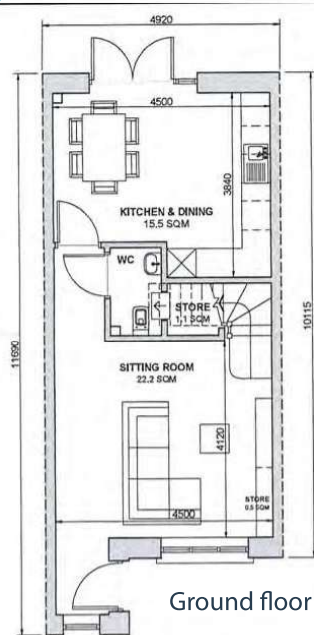
Balancing privacy and connectivity

Overall development size and amount of pedestrian movement is a key consideration for the design of the landscape. Homes near areas with high levels of pedestrian movement will be more exposed and additional protective privacy buffering should be provided between private and public spaces. This is commonly required in areas around front entrances and gates and key thoroughfares. Consider higher planting, one way glazing, and internal blinds.

Where appropriate threshold areas should be designed to be adaptable to allow for the needs of tenants and the wider community over the lifetime of the scheme. Consideration should be given to specific provision for aging communities and younger families.

3. Placemaking

Private threshold design considerations



Ground floor



First floor



Elevation

Fig.85. Typical 2 bedroom house
Housing Typology Research Document, Respond

Respond provide blinds for homes in new apartment buildings to ensure consistency in appearance. Whilst these can be used to mitigate issues of privacy and overheating, more holistic design measures should be used to ensure tenants can keep blinds open in the daytime hours without homes becoming too hot/ affecting well-being.

Front gardens (houses): private threshold design considerations



Fig.86. Front gardens with canopy detail to threshold
Baltinglass, Respond, PD Lane Associates

- Benefits of paring front doors and canopies should be considered.
- Consider space for a small cafe style table and chairs to encourage social interaction.
- Consider location of rainwater pipes and gullies where required.
- Allow space for bin and cycle storage and consider door swings.
- Ensure ease of access to post boxes.
- Space for a secure box for courier deliveries where required.
- Ensure ease of access to meter boxes.
- Safety and task lighting to be provided on PIR (passive infrared).
- External plant should be screened for visual and acoustic benefits.

Back gardens (houses): private threshold design considerations



Fig.87. 1.8m timber fences
Old Corduff, Respond, Crawford Architecture

- An area of hard-standing is to be provided next to the building line to allow for table and chairs.
- A 1.8m high fence should be provided to separate adjoining gardens, or areas of public realm.
- If using hit and miss fencing ensure adequate visual privacy is achieved.
- Where back gardens abut public road, fencing is not permitted
- Trees (including fruit trees) should be considered to provide additional visual amenity and privacy to aid well-being.



Apartment front terraces to public realm: private threshold design considerations



Fig.88. Shielded terraces to public realm
Carrs Lane, Respond, Opperman and Associates

- Ensure apartments at ground floor next to areas of heavy footfall, including those near entrances, incorporate privacy measures such as additional walls, railings and planting.
- Safety and task lighting should be provided on PIR (passive infrared) to help people find keys or when putting out bins etc.
- Consider using low level walls to prevent rubbish being blown into private areas.
- Carefully consider walls which may be perched on by passers-by. These should only be provided where social interaction is intended/ encourage and should be avoided elsewhere.

Apartment rear terraces to shared communal amenity: private threshold design considerations



Fig.89. Layering landscape for privacy
Charlestown, Respond, MCORM Architects

- Visual links to shared private amenity spaces should be balanced against appropriate levels of privacy.
- Layering of landscaping should be considered to increase privacy.
- Consider if walls, railings or hedges are most appropriate for topography.
- Consider if gates are appropriate for every space?
- External lighting to complement internal lighting strategy and avoid light spill into bedrooms.

Apartments located on deck access: private threshold design considerations



Fig.90. Widened passing places
Carrs Lane, Respond, Opperman and Associates

- Incorporate windows to bathrooms or kitchens facing onto decks (no bedrooms), and install blinds where needed.
- Use high quality external materials to reduce long term maintenance.
- Incorporate external lighting which accentuates shared communal access doors. Consider lower level lighting around private entrances, and ensure escape routes are clearly marked.

Apartment balconies: private threshold design considerations



Fig.91. Balcony protected from overlooking
Carrs Lane, Respond

- The design of boundaries should consider the specific context and provide adequate screening and security to avoid the need for retrofitting privacy screens.
- Consider perforated metal, or angled railings to increase privacy.
- External lighting should complement the internal lighting strategy.

3. Placemaking

Communal threshold design considerations

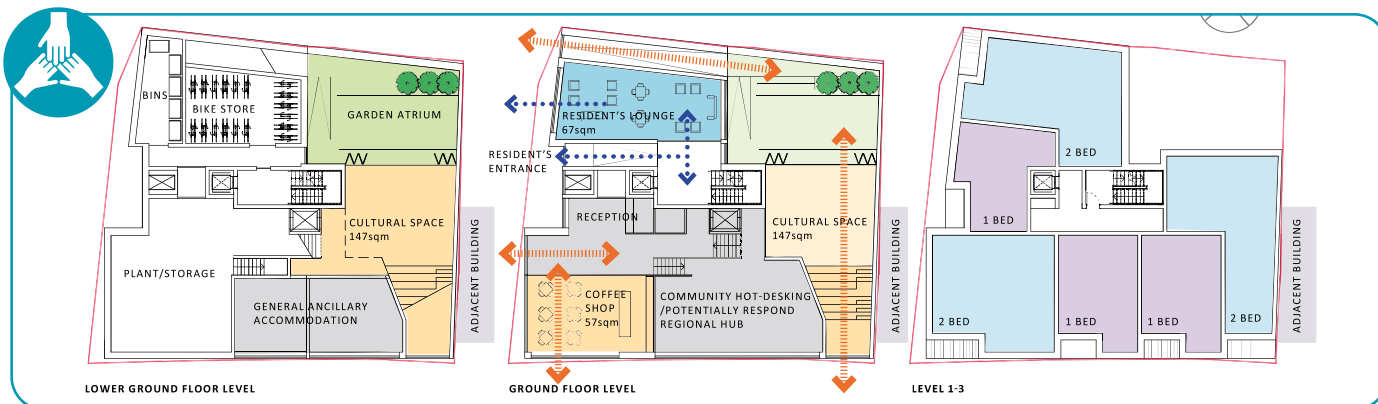


Fig.92. Plan showing key connecting thresholds in apartment building
EOI, Respond

Entrance lobbies facing the street: communal threshold design considerations



Fig.93. Welcoming entrance lobby
Carrs Lane, Respond, Opperman and Associates

- Lobbies should be well lit and clearly signed for visitors and deliveries.
- Generous wide pavements in front of entrances should be provided.
- External seating should be carefully located to prevent tailgating.
- Where practical direct views should be provided from the lobby to the rear courtyard to ease navigation and provide overlooking.

Entrance lobbies facing shared communal gardens: communal threshold design considerations



Fig.94. Entrance from courtyard
Carrs Lane, Respond, Opperman and Associates

- Entrances should be well lit and feel intimate as they are for use by tenants only. They should not be designed for use by visitors or for deliveries.
- Ensure routes through the landscaped courtyards are clear and well lit to aid wayfinding and encourage use throughout the year.
- Building fire safety management systems e.g: fire alarm control panel, main phone point for disabled refuge systems etc., should be carefully co-ordinated with other finishes and not be visually dominating.

Courtyards: communal threshold design considerations



Fig.95. Gated Residential amenity
Charlestown, Respond, MCORM Architects

- Level access to all areas should be provided on all projects.
- Thresholds to private courtyards should be designed to clearly indicate the change from a public to a private space. They may be gated and/or locked.
- Thresholds to public courtyards should appear welcoming and part of a network of nearby spaces.
- Public courtyards may provide amenity for adjacent buildings but only where good visual connections to the street are created.
- Automated gates should be considered to improve accessibility, particularly where they serve fully accessible homes.



Roof terraces: communal threshold design considerations



Fig.96. Mid level roof terrace
Charlestown, Repsond, MCORM Architects

- Roof terraces should be overlooked for passive surveillance.
- Areas of shelter should be provided.
- Access should be designed to avoid the need to walk directly in front of private front doors to protect privacy to new homes.
- Shared amenity spaces should be screened from private amenity spaces at roof level.

Communal gardens: communal threshold design considerations



Fig.97. Secure boundary with good connections to surroundings
Ardsolus, Repsond, Delphi Architects

- Provide clear visual links into communal garden spaces and ensure they appear welcoming.
- Consider gating areas to protect produce.
- Enclosures / boundary treatments must be in keeping with the surrounding architecture and landscape design.

Cycle stores: communal threshold design considerations



Fig.98. Secure Cycle store
Levitt Bernstein

- Drop kerbs must be provided nearby for ease of access.
- Cycle storage rooms should be limited to one entrance to promote security and avoid stores being used to gain unauthorized entry to adjacent areas.
- Open views into cycle storage rooms from public areas should be avoided to promote security.
- Automated doors should be considered to improve accessibility.
- Dedicated cycle storage rooms should be integrated as part of the building where practical.
- Stand alone cycle storage structures should be designed to prevent ease of climbing/ provide unauthorized access to adjacent areas.

Bin stores: communal threshold design considerations



Fig.99. Secure communal bin store
Ocean Estate, Levitt Bernstein

- Routes to/ from stores must be step free and unobstructed.
- Drop kerbs must be provided nearby for ease of access.
- Entrance doors must be highly durable, and secure.
- Stores must be well ventilated. Ventilation panels should ideally be separate from entrance doors to minimise maintenance.
- Automated doors should be considered to improve accessibility.

3. Placemaking

3.4. Strengthening communities with shared spaces

Respond aims to deliver and maintain strong, healthy communities.

Designing for interaction between neighbours is encouraged. A network of shared spaces which are accessible to all will fortify the social aspirations of a neighbourhood. Often, the social impact of smaller, incidental spaces are equally as important as larger scale interventions, as demonstrated by Respond's allotment projects which have become an integral part of our social green spaces strategy.

Types of shared space

Types of shared space that will encourage social cohesions include:

- Wider areas within access routes provide opportunities for conversation.
- Shared planters on communal circulation routes.
- Seats within landscape areas to encourage small groups to gather.
- A bench in the lobby of an apartment building to provide a place to wait for visitors or vehicles.
- Communal gardens and shared amenity rooms to provide a space for larger social events.
- Shared public spaces which are accessible to the wider community.

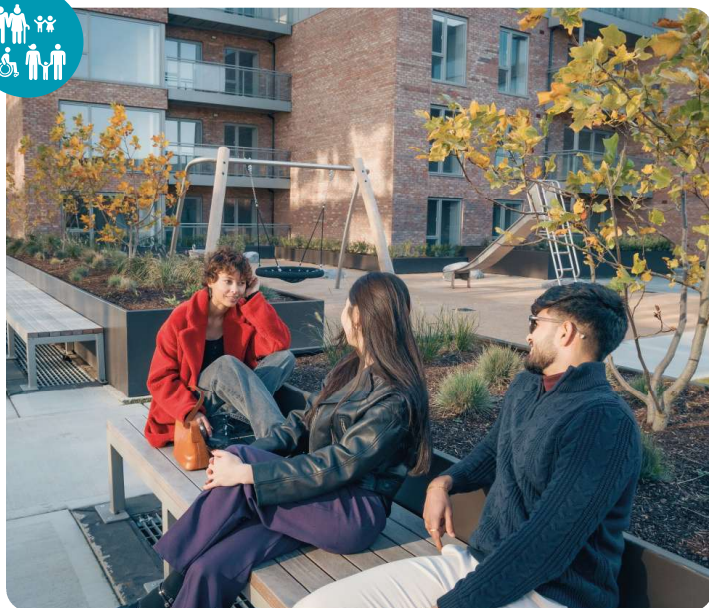


Fig.100. Shared seating to encourage social interaction
Elanora Court, Respond, McCrosson O'Rourke Manning Architects

Wayfinding and connectivity

Ensuring clear wayfinding throughout any new development will facilitate everyday life for users. It will help engender a sense of the connectivity, safety, security and well-being. Considerations should include:

- Clear signage that will help visitors, neighbours, and deliveries to navigate unfamiliar neighbourhoods. (Signage should be scheme specific to create a unique identity at each location.
- Links into local healthy walkways and green ways if applicable.
- External wayfinding should clearly identify the names of streets, main entrances to all uses (including apartment entrances) and individual homes.
- Internal wayfinding signage should be provided at each floor within communal circulation.
- Clearly marked escape routes and emergency lighting along escape routes.



Fig.101. Clear wayfinding through strong landscape design
Beechpark, Respond, Donnelly Turpin Architects



Strengthening communities with shared spaces

Lighting

Successful external lighting strategies are essential to ensure that developments appear safe and welcoming at night for those of any age, gender or mobility.

Best practice design considerations include:

- Ensure a lighting strategy forms an integral part of the initial master planning stage of each project.
- Lighting to all public and semi-public spaces should be designed to compliment the landscape design.
- Lights should be provided outside all private entrance doors.
- Communal front entrances should be more prominently lit than private entrances to reflect the larger number of users.
- Light pollution impacts should be minimised to tenants and ecology, particularly in courtyards.
- Use of PIR control systems should be considered.
- Signage should be well lit to aid wayfinding at night.
- Solar powered lighting should be considered to reduce energy uses and carbon footprints.
- Lighting strategies for new developments should be co-ordinated with existing lighting to surrounding areas to help stitch developments into their context.



Lighting for all schemes should be designed in line with Dark Sky Principles



Fig.102. Walkway lighting
Carrs Lane, Respond, Opperman and Associates

- Fittings must be robust and accessible to ensure ease of maintenance.



Fig.103. Street lighting, communal gardens and visual connections
Baltinglass, Respond, PD Lane Associates

3. Placemaking

3.5. Everyday practicalities

Respond's vision is to reduce the energy use of all their current buildings and implement current best practice in all new developments. Energy consumption and cost to users should be considered in all aspects of a design.

This section sets out some of the practicalities that can have a significant impact on reducing the energy consumption within buildings and encourage healthier, more sustainable lifestyles for tenants.

Respond aspire to keep service charges and other costs low for tenants to ensure schemes remain sustainable for the schemes lifetime. Measures needed to reduce the everyday running costs of schemes can have a significant impact on the master plan, building footprint, plan configuration and elevation articulation.

The following strategies should be agreed at the end of each design stage to ensure that running costs are managed throughout the design process, including the master planning stage.

- Fire safety strategy.
- Access strategies.
- Postal and security strategies.
- Vehicle storage strategy.
- Refuse and recycling strategies.
- Ventilation and window cleaning strategy.
- Infrastructure strategy.
- Plant replacement strategy.
- Energy Strategy
(see the sustainable communities section in Chapter 2).

Fire safety strategies

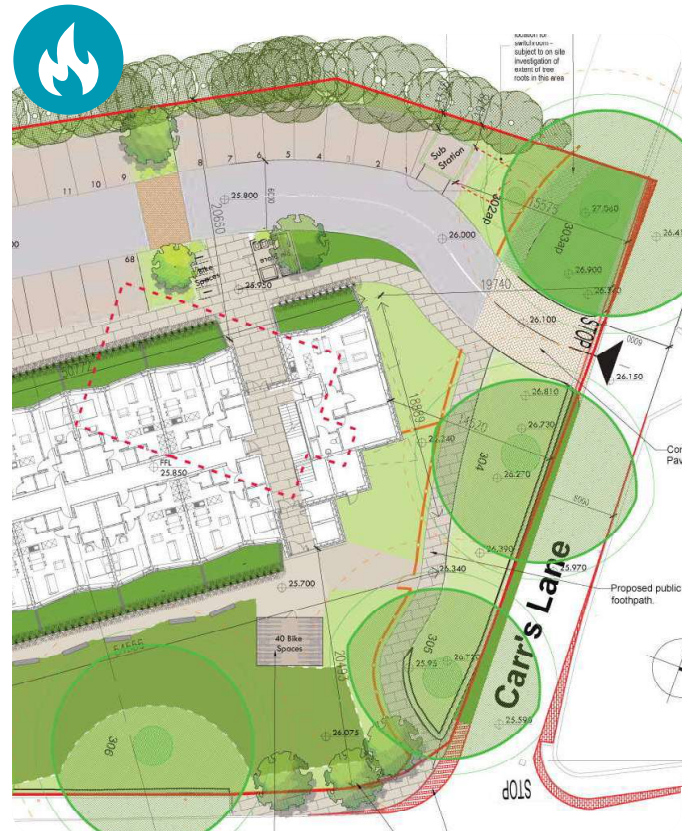


Fig.104. Plan showing access road and pedestrian routes for servicing Carrs Lane, Respond, Opperman and Associates

Fire safety strategies should be discussed at all design stages, including the master plan stages, as they can have implications on the location of new buildings and roads to ensure safe access for the fire brigade. Fire engineers are strongly recommended to be engaged at master planning stage to aid this process. Best practice design principles to be considered include:

- Ensure access for fire tender is provided.
- Ensure turning head is provided if required.
- Agree ventilation strategy.
- Confirm fire escape stairs and lifts are detailed and sized correctly.
- Confirm acceptable escape distances.
- Confirm if sprinklers are required.
- Confirm where water tanks can be located.
- Confirm materials meet required fire resistance rating.



Postal and security strategies



Fig.105. Sloping surface above bank of post boxes
Respond

Postal and security strategies should be agreed as early as possible as they can have spatial implications and impact routes throughout buildings and connections into landscape areas. Best practice design principles to be considered include:

- All post boxes should be clearly visible to aid deliveries.

In apartment buildings the following measures also need consideration:

- Banks of post boxes should preferably be housed inside a postal lobby at ground floor for added security, protection from the weather and ease of maintenance. A secure lobby containing the post boxes is recommended.
- Avoid providing space on top of post boxes where clutter could accumulate, by either inseting in wall or sloping surface above bank of post boxes.
- Audio and video intercom should be provided at all communal front entrances, with audio intercom at secondary doors.
- CCTV should be considered in all communal areas.
- Space for parcel lockers (such as Amazon hubs) should be accommodated at master plan stage where appropriate.

Vehicle storage strategies



Fig.106. Integrated cycle store
Aylesbury Estate, Levitt Bernstein

Cycle storage strategies should be agreed early on in the development of a scheme as they can also have spatial implications and impact routes throughout buildings and connections into landscape areas. Best practice design principles to be considered include:

- Tenants' cycle stores should be integrated into the architecture.
- Open views into cycle stores should be avoided as it reduces security.
- Storage for a variety of sizes of cycles should be provided to improve accessibility. Provide spaces for cargo bikes, family bikes, cycles with child seats, and recumbent cycles.
- Use of double height stands are acceptable on constrained sites but should be combined with Sheffield stands to increase accessibility.
- Uncovered visitor cycle stands located within the public realm should be located in areas of high activity such as near entrances, non-residential uses and play areas. They should be well overlooked to aid security.

Everyday practicalities

Refuse and recycling storage strategies



Respond encourage all people within their communities to engage in sustainable waste management.

The following best practice design principles should be followed to provide ease of use:

- A refuse strategy with appropriate travel distances should be agreed at early master plan stage.
- Distances from apartment front entrances to bin store door should not exceed regulations.
- The size of communal bin stores should be limited and divided where needed, to ensure ease of use and aid maintenance.
- CCTV should be included in all communal bin stores.
- A fire strategy for bins store areas must be considered and should be incorporated at master plan stage.
- Areas for storage of bulky items should be provided to aid collection of large items of waste.
- External bin stores doors should be secured and bird deterrents should be incorporated into the design.
- Recycling should be made easy for tenants to promote sustainable lifestyles.
- Bins should be clearly labelled to minimize misuse.
- The distance between communal bin stores and collection points should be limited for both large (Euro) bins and small (wheelie) bins.
- The location of collection points should be designed to minimise disruption to traffic during collection.



Fig.108. Communal bin store
Carrs Lane, Respond



Fig.107. Integrated bin store
Gascoigne Estate, Levitt Bernstein

- A dropped kerb at least 1.5m wide should be provided next to collection points to aid collection.
- A dedicated recycling station within homes should be provided.
- All kitchen and kitchenette spaces should be provided with a minimum of 3 separate waste bins for food, recycling and black bins

For houses and ground floor homes

- Bin storage should be provided to the front of the property within an integrated bin store.
- Materials should be hard wearing and compliment the landscape and architectural design.



Ventilation and window cleaning



Fig.109. Windows accessed by balcony for cleaning
Charlestown, Respond, MCORM Architects

Utilising natural light and passive ventilation throughout all building types is encouraged. Building users should also be able to manually control light and ventilation within their environments by opening windows and blinds.

Windows should be designed with openable areas to ensure they:

- Provide high levels of natural light.
- Are easy to open by ensuring casements are not too heavy or require tenants to lean out a long way out of a window.
- Shading devices should be included on South and West facing façades where required to prevent overheating.

Windows should be designed to be easy to clean by:

- Agreeing window cleaning strategies during the early stages of projects.
- Incorporating inward opening windows on upper floors or away from balconies are preferred as they allow tenants to clean windows more safely from within their home.
- Assuming pole cleaning approaches are only appropriate for buildings up to 4 storeys in height.
- Assuming abseiling cleaning approaches are to be designed out where possible, as they significantly increase service charges for tenants.



Fig.110. Low level windows can be cleaned by pole
Kingswood, Respond, Crawford Architecture



Fig.111. Blinds to be provided for all homes
Dovedale, Levitt Bernstein

Respond provide blinds for all developments, allowing for consistency in appearance. Whilst these can be used to mitigate issues of privacy and help reduce overheating, more holistic design strategies should be used to ensure tenants can keep blinds open in the daytime hours.

3.6. Accommodating services

Sustainable infrastructure and future proofing

Respond encourages holistic design of infrastructure works from the outset of any scheme to minimise both disruption during construction and the need for future maintenance or repairs.

A best practice approach should allow for early engagement with stakeholders such as ESB, TII, and Irish Water. Early agreement should be gained on easements zones around built elements and tree pits, acceptable materials and access requirements. This is critical as it will impact the layout of new buildings and landscape works. On larger schemes this should be integrated as part of the development of the overall master plan design.

Plant access and maintenance



Fig.112. Plant room with adequate space for replacement
Levitt Bernstein

Well maintained plant will rely on ease of access. Best practice design principles for consideration include:

- Agreeing the plant access strategy at early stage.
- Access to plant spaces to facilitate maintenance must avoid routes through private gardens or homes.
- Roof space on apartment buildings may be very restricted. The design will need to balance demands for ASHPs, PV's, Green/ Brown/ Blue roofs and visual amenity should be considered.
- Access to plant needing regular maintenance must not require temporary access equipment.

Phased construction may also need to be considered on larger schemes. Where this is required utility strategies should be developed to match the approach to phasing to ensure continuity of services to retained buildings in and around the site and to minimize the need for temporary service provision. As part of this process it is critical to consider how spaces outside of the construction hoarding will function and how the development may impact the landscape or setting out of the buildings. Hoarding per phase should be considered to allow for safe pedestrian footpaths, clear servicing and emergency vehicle routes during construction. Temporary landscaping should be avoided where possible and where used, planting should be relocated following the end of the temporary arrangement.



Fig.113. Integrated plant access
Sutherland Road, Levitt Bernstein

Inclined access ladders or stairs should be provided from the outset, with a strong preference for stairs.

- Plant replacement strategies should be incorporated into the early planning stages of a project. Use of cranes for plant replacement should be avoided where possible and where assumed should identify space for temporary cranes.
- Plant and ventilation requirements should not reduce activity at street level. Plant areas facing busy streets should be minimised where practical when developing plant maintenance strategies.
- Designers risk assessment must be provided.

“ My home is really important to me. I have a little boy with special needs. And for the last seven years, we’ve been in and out of homes and apartments and never having a safe space for him. So my home is very, very important to me. It’s everything that we needed. And it’s been life changing for us, really. I get along really well with my neighbours. It’s a small estate, which is really good as well. Nice and quiet and again, really safe for Michael. So that’s really important to me as well. ”

Respond tenant



Fig.114. Creating spaces for future generations, placemaking through holistic design
Baltinglass, Respond, PD Lane Associates





4. Transport

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4. Transport



Fig.116. Connecting thriving healthy communities
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Respond's vision aligns with that set out within the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities and aim to ensure that car-parking provision should be minimised, substantially reduced or wholly eliminated.



4.1. Introduction to transport

A holistic review of transportation requirements should be carried out for each site to ensure a transportation strategy is developed in line with local and national standards.

Gaining a thorough understanding of the local context and requirements of tenants and building users is critical for each project. Consideration must be given to promoting active lifestyles and the associated health and environmental impacts of different modes of transport. It is critical to ensure infrastructure and parking provision is inclusive and accessible for the wider community through the use of a wide variety of modes of transport.

Respond align with government policy on transportation and the requirements in relation to car parking quantum, form and location as referenced in the Residential Development and Compact Settlements Guidelines.

Respond encourages design teams to work in line with each local authorities Development Plan, and the more recent Sustainable Residential Development and Compact Settlements Guidelines, which reiterate Government policy that car parking provision explores more sustainable modes of transport and should be limited within new residential development.

It is critical that improved connectivity and permeability are integrated into master plans at feasibility stage, to encourage and facilitate more active and sustainable travel modes (walking, cycling and public transport).

Transport strategies developed for each scheme should:

- Connect communities.
- Facilitate transport for people of all ages, abilities and budgets.
- Provide for sustainable modes of transport in line with policy.
- Encourage active lifestyles.
- Be integrated into master plans from master plan stage.
- Consider construction cost and ongoing running costs.



Fig.117. Creating spaces for future generations
Finnstown, Respond, Ferriera Architects

4.2. Routes and connections; connecting communities

Social integration is at the heart of everything that Respond does. Feeling connected to your surroundings can have a significant impact on making tenants feel more embedded in their local community and subsequently improve their well being. As such, discussions about new and existing routes and connections are crucial at every stage of design and for every scale and type of project.

A 'people first' approach should be used, employing healthy street design principles to encourage more interaction between neighbours and increase the use of sustainable modes of transport.



Fig.118. Legible connection routes
Carrs Lanes, Respond, Opperman and Associates

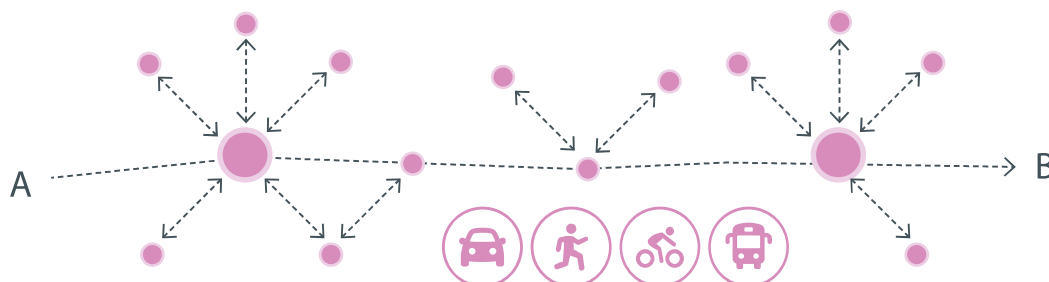


Fig.119. Diagram to illustrate proximity of communities and services

Best practice promotes healthy streets where pedestrians feel safe and relaxed. This can promote greater use of public spaces and encourage informal socialising within the public realm. The best practice principles set out below should be used at early stages of the design of all projects to maximize opportunities for social interaction:

Facilitating mobility and appropriate vehicle access is also essential for creating well connected communities. The design of external circulation should ensure the ease of use by tenants. Internal travel distances as part of circulation routes should also be minimized where practical.

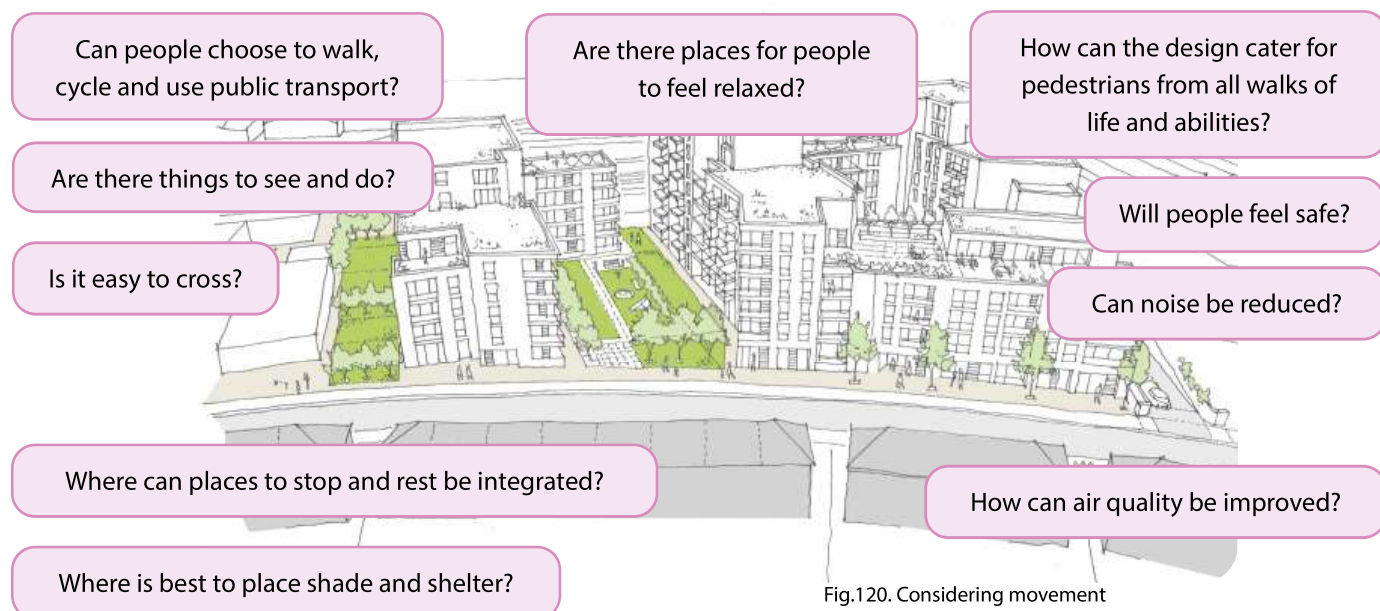


Fig.120. Considering movement
Respond in conjunction with Ferreira Architects for EOI submission to DCC



A pedestrian first approach should be taken for all projects. Best practice design principles to be considered include:

- Strategies for pedestrian and vehicular routes should be agreed at early stages of the master plan design.
- Traffic types to be considered should include:
 - Pedestrians (including those with mobility aids and buggies).
 - Bicycle, scooters and electric bicycles.
 - Electric and other vehicles (cars, vans, motorcycles etc.).
 - Emergency and refuse vehicles.
 - Taxis, deliveries and removals.



Fig.121. Promoting active travel
Respond



Fig.122. Active travel
Bartlett Park, Levitt Bernstein

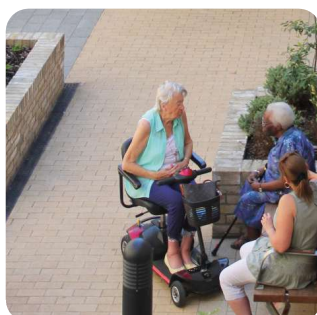


Fig.123. Rideables
Hazelhurst Court, Levitt Bernstein



Fig.124. Shared transport
Nethercross, Respond



Fig.125. Private vehicles
Carrs Lane, Respond, Opperman and Associates

When retrofitting existing buildings, opportunities to improve connections should be considered. Minimal amendments to the design may allow significant benefits to the building users and local communities.

Best practice design principles to be considered include:

- All routes within a new development must be safe.
- Safety along walking and cycle routes, routes to child play spaces and other local amenities, need particular care.
- Traffic calming should be designed into any residential scheme from the outset rather than added retrospectively.
- Consider tenants experience when designing routes: for example walking to the car or post box is where tenants interact with their neighbours.



Fig.126. Traffic calming, safe crossing places
Carrs Lane, Respond

4.3. Dealing with vehicles and changing transport trends

Easy access to transport can help empower tenants and enable more independent living. Developments should ensure that all tenants feel safe taking any form of transport and designs should build in flexibility to allow for future changes in travel approaches, as seen most recently in the move towards more electric vehicles.

Developments should respond to the specific requirements of local communities, such as a demand for vans, mopeds, scooters or motorcycles as part of tenants jobs. Storage for a variety of vehicle types should be provided to reflect local needs.

The proximity of a development to public transport and community facilities will also form a key principle in the design of any development, including both urban and rural schemes. Transport strategies should reflect local transport provision and should be agreed with Respond's housing team early on during the development of each scheme. Particular consideration should be given to inclusive transport for older people, younger families and tenants with disabilities. Providing sustainable transport options for tenants is highly encouraged as it can allow tenants to stay living independently in their homes for longer.

Compact growth settlement guidelines advocate for a reduction in maximum car parking in urban areas. Respond schemes should align with government policy in this area and should support opportunities for further reduction of parking ratios in high density urban areas.



Fig.127. Assessing trends in types of transport

Considerations for public transport should include:

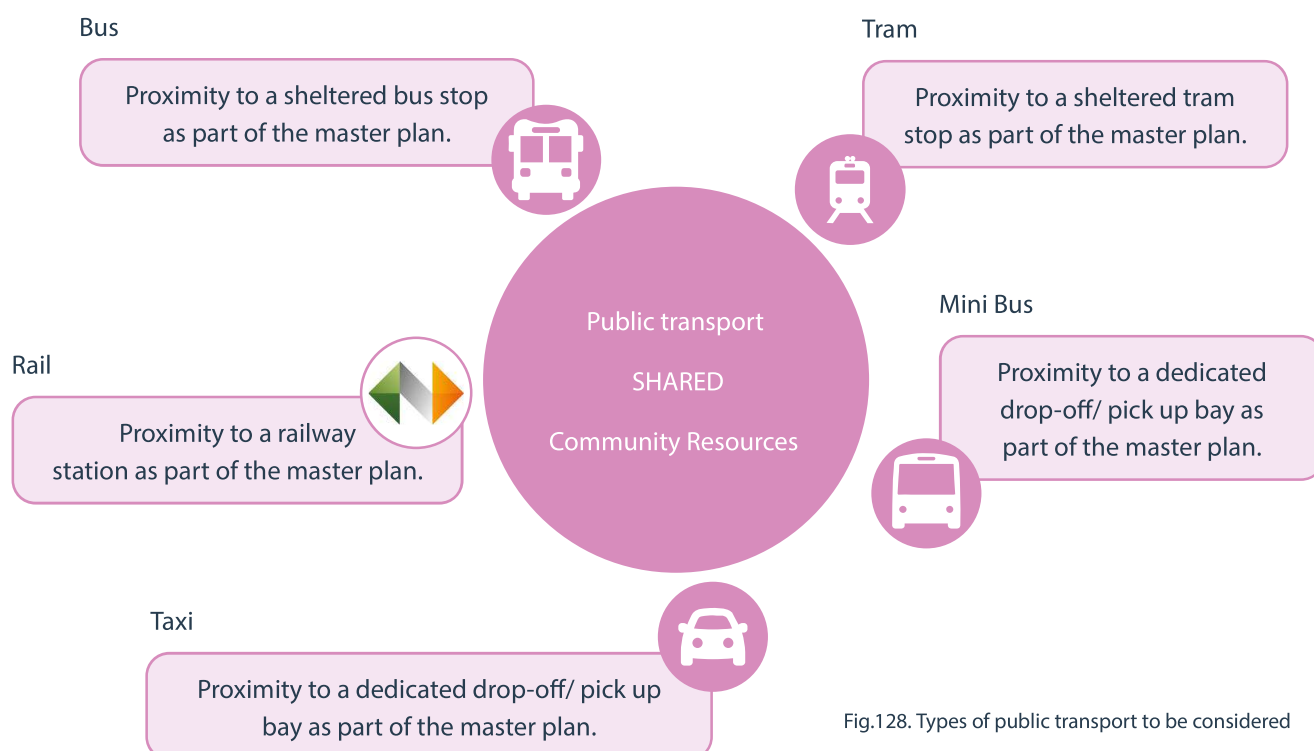


Fig.128. Types of public transport to be considered



Fig.129. Incorporating cycle routes to encourage sustainable method of transport
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Providing safe and easy access to more sustainable modes of transport is highly encouraged and will help pave the way to more sustainable communities. Traffic calming is an essential consideration as quieter roads are more suitable for active modes of travel. Clear signage and wayfinding will also encourage sustainable transport by making it safer and easier to access a variety of transport modes.

Considerations for non-public transport should seek to include:

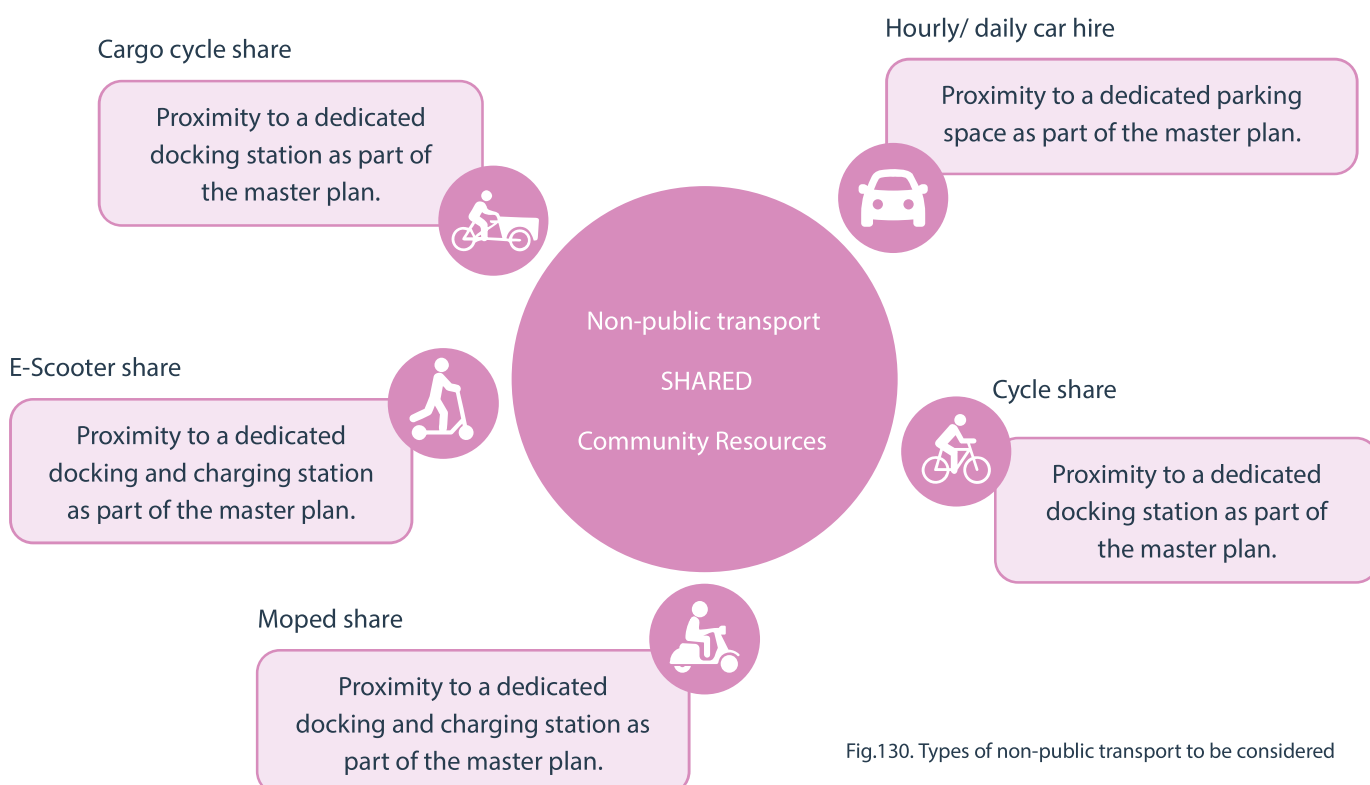


Fig.130. Types of non-public transport to be considered

4.4. Cycles and other vehicles

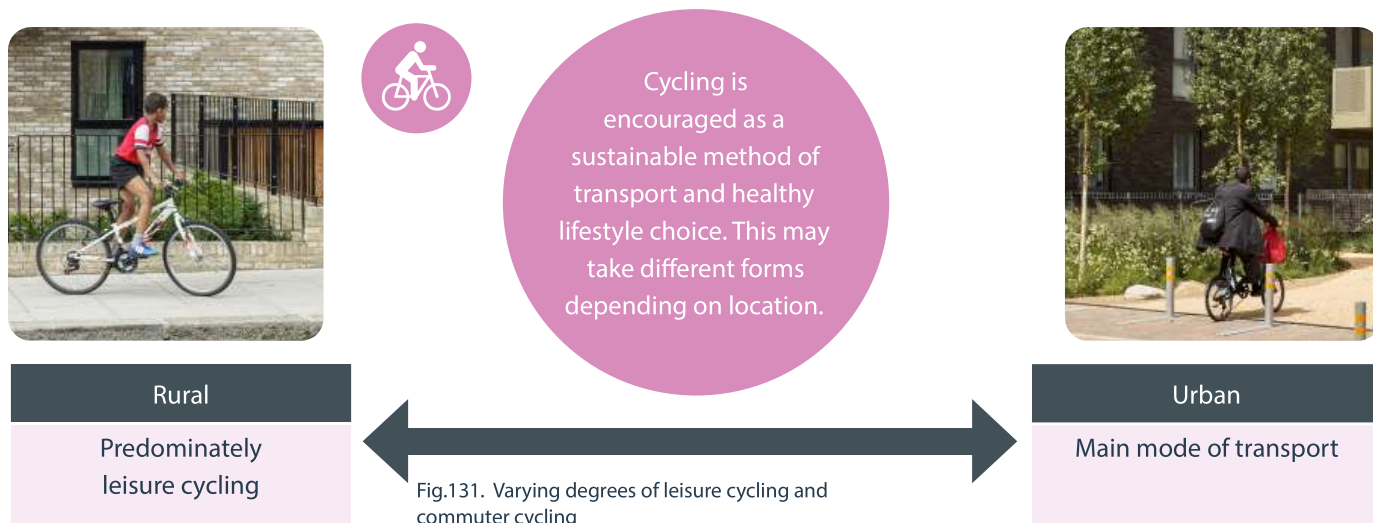


Fig.132. Integrated individual external cycle stores
Ocean Estate, Levitt Bernstein



Fig.133. Covered visitor cycle stands
Carrs Lane, Respond

Design for cycles stores must consider:

- Secure cycle storage needs to be provided for each household and for each service facility.
- EV cycles and push cycles should be easily accessible by all tenants to encourage their use and facilitate charging.
- Storage should be secure.
- Power/ washing/ drainage and repair facilities should be provided in all cycle stores to encourage use. Direct links to cycle routes/ roads should be signed and/or created where practical.
- Storage should be accessed directly from outside.
- Houses: Secure cycle stores should be provided at a convenient location. For mid-terrace homes provide at front-end of terrace. For semi-detached homes provide stores to rear with external access as access through the house will discourage use.
- Apartments: Access to cycle stores should be through a single secure door. Ideally access should be directly from the street to avoid damage caused by wheeling cycles through lobbied areas.

Safe and secure cycling routes for people of all ages and abilities should be prioritized in developments.



Other modes of transport to consider:

- Storage for mobility scooters (including power charging points) should be provided. This must be provided for UD homes and should be provided for all homes as a future proofing measure to enable tenants to age in place as their mobile needs change.
- Storage rooms for buggies, children's cycles and push scooters should be considered.
- Communal cycle stores should allow for at least 10% specialist cycles such as cargo bikes, family cycles and recumbent bikes.



4.5. Car parking quantum and location



Approach to car parking needs continuous consideration in the light of evolving public policy on climate, air quality and biodiversity. Design teams should advocate for restriction of car parking in central locations and express preference for sites where sustainable mobility options are available. Furthermore, the improving bus services both in rural and urban areas (local links, bus connects) should be taken into account.



Fig.134. Clearly labelled parking spaces
Baltinglass, Respond, PD Lane Associates

The Design Manual for Urban Roads and Streets (DMURS)17 and the Sustainable Residential Development and Compact Settlement Guidelines should be referred to while reviewing parking design strategies.

A parking management strategy should be agreed at master plan stage. Parking strategies should be based on current car usage, but should consider potential changes in patterns of use over time such as reduction in personal car use. Where reduction in car use is proposed, potential benefits should be clearly communicated with local tenants such as larger areas for public realm and urban greening; improved air quality; quieter streets, and cleaner, safer streets.

Parking strategies should consider the following:

- Clear principles of how to mitigate problems of unauthorised parking should be agreed at the outset. This may affect ownership boundaries to facilitate parking management.
- Labelling and numbering of spaces should be considered.
- Requirements of local authority must be considered, alongside proximity to infrastructure.
- Informal parking should be designed out to ensure the public realm can be enjoyed by the community as intended. (e.g. using planters/ lighting/ boulders.)
- Electric vehicle charging – infrastructure should be provided for all developments.
- Each new parking space should be provided with either an EV charging point or cabling infrastructure to allow simple retrofitting of a charging point at a later date.
- Car clubs should be investigated and encouraged where commercially viable.
- Visitor parking should be catered for in all schemes.
- Design of parking spaces should make parking easy to access. Bollards should be avoided where possible.
- Parking options for larger vehicles should be considered including vans, and UD + parking spaces.
- Routes and distances from drop-off bays and UD+ bays should be incorporated into the master plan at early stage feasibility.
- All new parking spaces should be designed to be able to cater for alternative uses in the future to cater for changes in levels of car use. Alternative uses which may be considered include trees, planting, play areas, seating, cycle parking and storage areas.

4. Transport

4.6. Transport principles: site layout and scheme design

Suggested parking considerations for varying scales of development

		Suggested location	Comments	Future proofing
In curtilage parking 		Rural only to be used in specific circumstances	Higher parking ratios needed due to higher reliance on private transport.	Ensure space could be converted into additional private amenity space for tenants, additional cycle or scooter parking, or additional planting.
On street parking 		Suburban/ Urban	Parking ratios should be kept low and access to public transport should be improved.	Ensure car parking spaces could be converted into additional public cycle parking, soft landscaping, or used as a space for a car club vehicle.
Courtyard parking 		High Density Urban	Potential for low or zero parking developments. Enhance visual amenity by addition of trees and buffer planting.	Ensure space could be converted to increase the size of shared communal or public amenity space.

Fig.135. Suggested parking considerations for varying scales of projects

Podium and basement car parking

Cost for underground parking is becoming prohibitive, for initial capital cost and ongoing running cost, as such should only be considered if no other option is available.

Podium car parking can be considered, particularly in schemes where there is commercial at the ground floor. Early engagement with fire safety engineers at scheme conception is essential, to ensure implication

of fire safety with regards to electrical vehicles, means of escape and sprinklers is included in spacial and cost considerations.

In addition safety features including boosted cell phone signal should be provided, and approved by the Garda. Cold, unwelcoming spaces will not be deemed acceptable – attention should be given to the lighting and materials used in these spaces. Attention is also required in ensuring appropriate security measures designed in at access points.

Respond encourage balancing parking provisions with sustainable transport goals, especially in central locations. And prefer sustainable transport options to be pursued



Emergency services and deliveries

All new developments must ensure easy access for emergency services, refuse trucks and deliveries. This should be considered during the early development of massing and public realm design. Access should avoid steep changes in level and long distances between entrances and should include safe stopping zones for emergency vehicles.

//

My family and I are quite honoured to move into such a wonderful new home. As a student studying architecture, I also have the privilege of appreciating such a beautiful project. Living in such an amazing exemplar is a motivator for me as a student and is something I draw inspiration from.

//

Respond tenant



Fig.136. Minimising parking
Cornamona Court, PKA Architects for DCC





5. Designing good homes

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5. Designing good homes

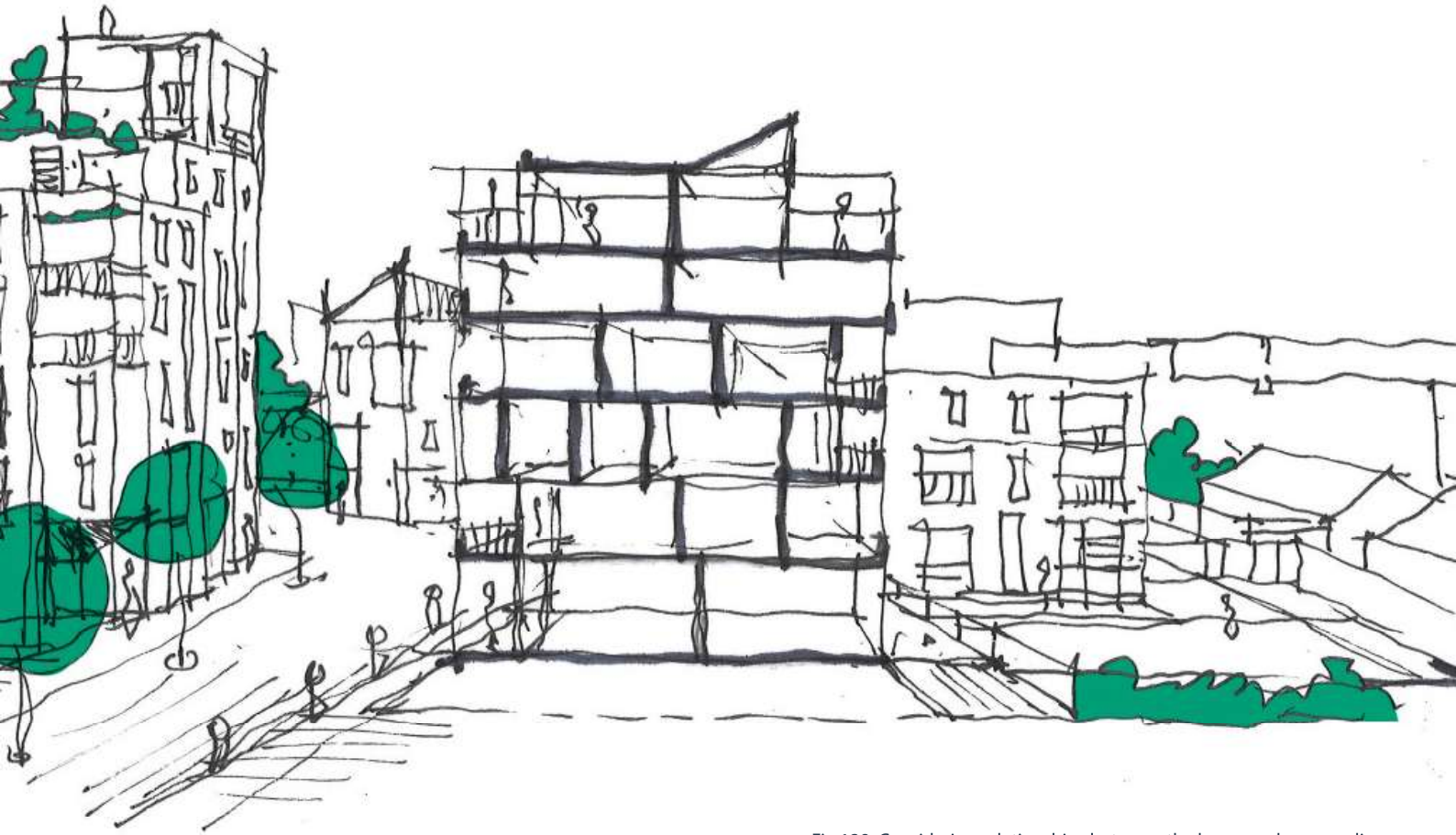


Fig.138. Considering relationships between the home and surroundings
Respond in conjunction with Ferreira Architects for EOI submission to DCC

// I love it. It's my own little corner and I'm just happy,
delighted with it, I just love it. //

Respond tenant, Pairc de Hide, Fermoy, Cork



5.1. Introduction to designing good homes

Respond strives to create high quality homes which provide a feeling of safety, security and equality.

The design of new homes should promote the creation of multi-cultural, multi-generational and diverse communities. Developments should introduce variety in the terms of both type and layout of new homes to promote more vibrant and successful communities, and to reflect the diversity of local housing needs.

Future-proofing and flexible housing layouts should be incorporated, if possible, at planning stage. Respond's scheme at Duntahane, Fermoy, Co. Cork has 46 units and a community building. It is a good example of how a Respond scheme has been future proofed, with flexible attic spaces which could be converted to bedrooms.

Respond take pride in:

- Providing a variety of housing types and tenures.
- Providing own door housing where appropriate within the master plan design.
- Designing in flexibility.
- Designing with a diverse user group in mind.
- Providing homes and the facilities which promote independent living where possible.
- Creating places to live which Tenants are proud to call home.



Fig.139. Creating a warm and inviting environment
Elanora, Dublin, Respond, McCrosson O'Rourke Manning Architects

5.2. Outline of Respond housing types and tenure

Integrating housing types and user groups adds social value and sustainability to communities. New master plans should integrate a mix of social housing and, where appropriate, cost rental housing from the outset.

Some Respond housing is located in relatively small settlements, where houses at a low to medium density are appropriate. Many Respond sites are in urban areas where high to medium densities are required, and so consist of mostly apartments. All new developments must demonstrate how the proposed mix of housing types meet both the individual scheme brief and local council targets.

Respond provide a range of homes as set out below:



Fig.140. Families
Respond



Fig.141. Young adults
Respond



Fig.142. Older people
Respond



5.3. Housing innovation, typologies and the arrangement of homes

As set out in Chapter 3 - Placemaking, variety in terms of the size and type of homes form an essential part of the character of a place.

New master plans should include a combination of both different housing typologies and different sizes of homes to create variety.

Design teams should consider efficiency when designing a mixed master plan.

Stacking of homes within buildings is encouraged to ensure cost-effective construction and efficient service runs.

Typical design approaches for different housing typologies are set out below:



	Houses	Bungalows	Duplex	Apartments
Access options	Street access	Street access	Street access/ Deck access at upper levels/ Corridor access at upper levels	Street access/ Deck access at upper levels/ Corridor access at upper levels
Minimum size	3 bedroom 5 person	1 bedroom 2 person	2 bedroom 4 person	1 bedroom 2 person (and studios, although not a desirable sized dwelling for Respond and minimum sizes should be avoided)
Maximum size	4 bedroom 8 person	3 bedroom 6 person (some exceptions apply)	3 bedroom 6 person	3 bedroom 6 person
UD level	UD	UD/ UD+/UD++	UD	UD/ UD+/UD++



Universal Design:

Respond aspire to provide UD homes as standard to all developments to help build in future flexibility and enable tenants to age in place.

Each scheme should demonstrate it maximises the number of UD+ homes up to 20% of new homes subject to viability. The target level of UD+ homes should be defined in initial scheme briefs to provide design teams with clear guidance on scheme specific aspirations.

Where UD+ homes are integrated as part of a master plan they should:

- Locate UD+ and UD++ at ground floor.
- Provide a bedroom and bathroom at entrance level.
- Provide a ground floor level access shower and a living room at ground floor in homes with 2 or more storeys.
- Design living room to enable conversion into use as a ground floor bedroom if needed.

5. Designing good homes

House and apartment design

These pages set out comparison summaries of two exemplar homes; a two bedroom suburban terrace house and a two bedroom open plan apartment.



New suburban terrace house

- 2 bedroom.
- 89 sqm.
- Disabled WC at ground floor plus bathroom at first floor.
- Private open space rear garden accessed through kitchen/dining.
- Defensible front garden.
- Circulation through living area.
- Winding stair is difficult to make accessible.
- Space to extend to the back.
- Space to extend into the section of the roof "grow house" with planning permission granted.
- The scheme enhances community integration and the social fabric of the area. The "Grow House", was a house type developed by Respond for use in this scheme.

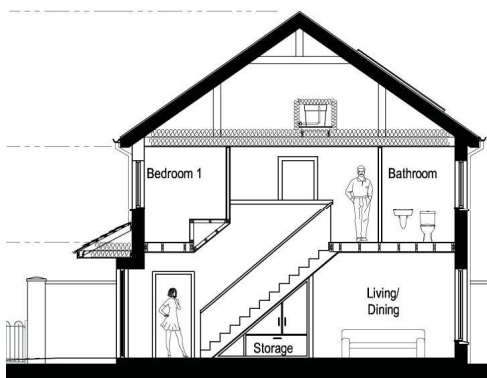
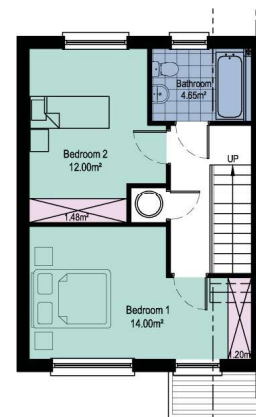


Fig.143. Typical 2 bed house
Duntahane, Fermoy, Respond, Respond Design Dept



Future-proofing:
Terraced housing
layouts should incorporate
flexible roof design to allow
provision for potential
future extension into attic
spaces





Open plan apartment

- 2 bedrooms.
- 86 sqm (same area as 2 bed terrace).
- Disabled bathroom plus en-suite.
- 7sqm balcony accessed off living space.
- Parking provided at basement/ ground floor level.
- Communal open space (7sqm per 2 bed apartment).
- High-density adjustable depending on context.
- Access from rear of apartment with living space and bedrooms facing towards communal open space.
- Aspect must avoid being primarily north facing as apartments would not receive direct sunlight during the day.
- Single level makes apartment accessible and easy to convert to meet universal design principles.
- Integrated storage space and plant space.
- Central management controls maintenance.
- Communal facilities can be available.

Schemes developed with a higher proportion of apartments can offer opportunities for more communal facilities and greater social interaction



Fig.144. High density apartment building
Charlestown, Respond, MCORM Architects

For open plan arrangements sprinklers must be provided.

In some instances including a protective lobby will allow for sprinklers to be avoided reducing cost. A fire safety engineer must be consulted where this is considered.

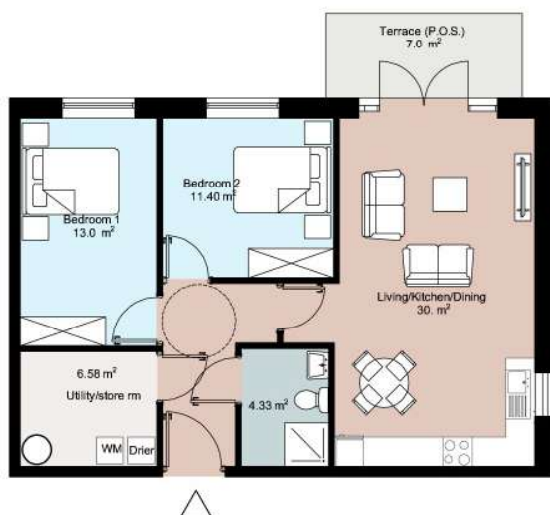


Fig.145. Typical 2 bed apartment
Housing Typology Research Document, Respond

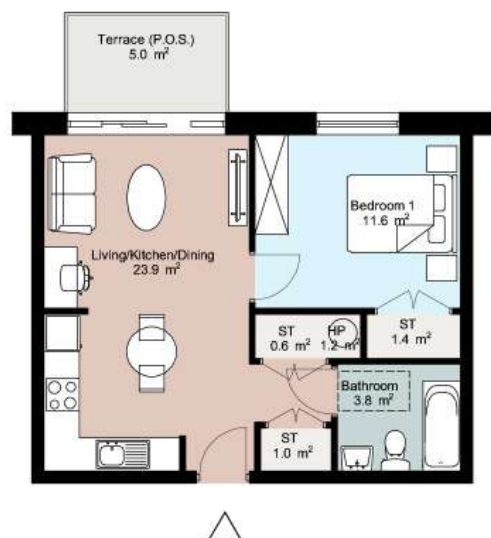
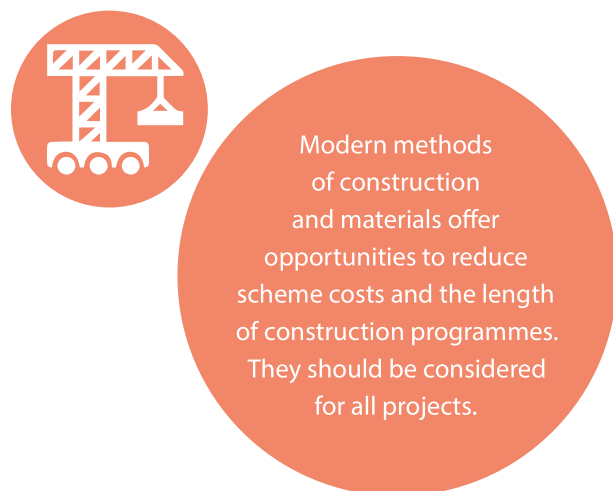


Fig.146. Typical 1 bed apartment
Housing Typology Research Document, Respond

5.4. Buildability and construction type

Traditional versus modern methods of construction (MMC)



There are benefits to using both modern and traditional construction methods. The master plan of both approaches should be assessed prior to completing master planning stages of a scheme as the choice of construction may inform the building form, layout, window pattern and energy strategy.

Pros and cons of traditional construction and MMC

Modern methods of construction

- ✓ High-quality homes with increased sustainability.
- ✓ Reduced construction time required on-site can reduce costs.
- ✓ Typically involves lower numbers of site staff and associated reduction in staff parking/ trip generation, reduced welfare facility requirements, and reduced storage areas.
- ✓ Reduction in noise and dust disturbance to neighbouring homes.
- ✓ Quality control is easier to control within a factory environment for offsite elements.
- ✓ Health and safety is easier to control in a factory setting, as is encouraging diversity.
- ✗ Greater reliance on transportation and delivery logistics, typically for larger elements.
- ✗ Limited local manufactures and installers.

Regardless of the type of construction it is essential that robust materials are used. Where construction includes the use of modern materials, it is crucial to ensure that products have been adequately tested/ certified and will fully meet the brief requirements over the anticipated lifespan of the product.

Choice of construction approach should also consider the degree of adaptability needed to respond to future changes in user/tenant needs or changes in legislation. The degree of adaptability needed will vary between locations and housing typologies but will affect the layout of new homes and the size of potential elements of the building.

Where modern methods of construction are used, procurement strategies should avoid reliance on single supplier construction approaches to minimize risks from supplier insolvency. Ideally designs should be developed to allow for at least two different construction approaches without impacting layouts.

Traditional

- ✓ Wider choice of contractors and manufacturers.
- ✓ Adaptations more easily accommodated during and after construction.
- ✓ Future maintenance and adaptability.
- ✗ Longer construction programmes typically.
- ✗ Quality control more difficult to manage on site.



Pro



Con

Respond encourage design teams to explore modern methods of construction and would propose options appraisals to be included in initial design studies.

Consideration of longevity of elements and process for replacement, should be integrated into ongoing design discussions.

Fig.147. Designing good homes
Sarsfield Rad, Respond



Modern methods of construction

The individual constraints of each site will impact the choice of construction method. Where the use of MMC strategies are being considered, early engagement with manufactures is encouraged to understand appropriateness of construction systems being considered.

Consideration should be given to:

- Rational grid layouts and repeatability.
- Transportation costs and sizes of components.
- Cranage and sequencing of works.
- Spans required/ avoiding transfers/ column arrangement.
- Standardisation opportunities and cost implications of bespoke elements.
- Stacking opportunities and size of zones for building services/ structure.

The following building elements would typically be assessed as part of any MMC strategy appraisal.



Components

Components are highly recommended throughout, as they can present good value for money. Typical examples include:

- Prefabricated door sets.
- Prefabricated kitchens and other items of joinery.
- Standardised fittings and fixtures.



Frames

Framed components can significantly reduce construction programmes and allow for hybrid construction approaches where prefabricated elements are paired with traditional construction.



Pods

Pod construction approach may be suitable to provide:

- Bathrooms.
- Utility cupboards.
- Kitchens.

Appropriate where designs include lots of repetition, but may be difficult to adapt. Restricts location of SVP's so must be integrated at initial layout stage.



Panels

Panels offer benefits of speed of construction with ease of transportation. They may feature only structural elements or fully fitted windows, insulation and cladding. Their advantages include:

Opportunity for services to be integrated.

Allowance for building envelope to be sealed earlier in construction programme.

Panels can be utilised where small batches are required.



Volumetric

Volumetric design allows the greatest level of offsite construction and can produce greater programme savings. Typically internal fittings and fixtures will be fitted prior to delivery. Only viable where a high degree of repetition is envisaged. Requires longer pre-construction period.



Fig.148. MMC Scheme Dublin
Bunnratty Road, Levitt Bernstein



MMC Case studies

The three schemes shown on this page were designed by Levitt Bernstein for Dublin City Council.

Each scheme has varying architectural characters designed to suit their specific context.

However, each scheme is made up of varying arrangements of the same 4 apartment plans in varying configurations, and all have been constructed using prefabricated panel systems.

The pre-tender design built in flexibility to allow a range of MMC approaches, with the successful tenderer using a panelised light gauge steel frame structural system.

Allowing for replication of plans, has allowed for economies in scale for the components of the housing portfolio.

Initiatives to promote MMC in Ireland include:

MMC Demonstration Park:
Mountlucas.ie

Construct Innovate:
constructinnovate.ie

Build Digital:
www.built.digital/project.ie

Build to Innovate:
www.enterprise-ireland.com/en/funding-supports/built-to-innovate



Fig.149. Bunratty Road, Dublin
Levitt Bernstein



Fig.150. Bonham Street, Dublin
Levitt Bernstein



Fig.151. Cork Street Dublin
Levitt Bernstein

Buildability and construction types

Energy and building services

A 'fabric first' (or low energy) approach should be used on all projects to help build-in energy efficiency into the fabric of all new buildings. Use of higher performance thermal envelopes will also help reduce tenant energy cost, helping to minimize the effect of fuel poverty.

High efficiency building services strategies should be combined with any low energy approach to building fabric. This will need to consider:

- Connection to district heating networks where available nearby.
- Reducing the length of communal heating run routes to minimize heat losses (communal systems only).
- Efficient location of renewables to minimize heat loss.
- Retrofitting existing buildings with more efficient services.



Fig.152. Rooftop plant
Carrs Lane, Respond, Opperman and Associates

		Notes	Houses	Duplexes	Apartments	Non resi uses
	Individual Air Source Heat Pump (ASHP)	Acoustic enclosure to be provided.	Yes (best located in garden)	Yes	Yes	Yes
	Communal Air Source Heat Pump (ASHP)	Acoustic enclosure to be provided.	To be avoided	Yes (best located on roof)	Yes (best located on roof)	Yes (best located on roof)
	Ground Source Heat Pump (GSHP)	Only to be considered on large suburban sites. Will require 100m boreholes or significant amounts of land of horizontal trenches.	Location dependent	Location dependent	Location dependent	Location dependent
	Solar Thermal Panels (STPs)	To be maximised throughout, orientated SE through SW, highest points recommended, 1m wide access zone required.	Yes	Yes	Yes	Yes
	Solar Photovoltaic (PV's)		Yes	Yes	Yes	Yes



5.5. Inclusive design for an integrated community

'Lifetime homes', Universal Design and designing for dementia approaches to design, should all be considered in new developments to ensure that new homes are designed to meet the current and future needs of an aging population. This approach offers a wide range of health and well-being benefits, enabling tenants to age in place more easily, and avoid the need to move away from friends and family to live in housing which meets their needs.

Scheme specific design briefs should be developed to set out specific requirements to reflect anticipated local housing needs and should include a target % of UD+ homes and other forms of specialist housing.

Designers should also recognise the importance of diversity and inclusion awareness in informing the best design outcome to ensure inclusive communities can thrive.

There are a number of best practice principles for flexible inclusive design which Respond would like design teams to consider within each housing scheme, including:



Fig.153. Colour to aid wayfinding
Respond

	Shared spaces (apartment buildings only)
1800	Wider walkways and corridors. 1800mm minimum throughout.
	Colour and signage to be considered from an early stage. This will have a cost implication.
	Each apartment door should be clearly identifiable.
	Spaces to sit integrated into the design to allow for rest.



Fig.154. Generous private hallway
Sarsfield Road, Development, Respond

	Private space
	Open plan kitchen/ diner which can be sub-divided into 2 rooms as needs of the tenants change.
	2B3P typology – single bedroom can double as an office space for single parents.
	Wider entrance spaces should be considered with storage for a wheelchair/ buggies.
	Location of bathrooms next to main bedroom with opportunity to incorporate future additional connecting door.
	Provide dedicated 'home office' area to allow for hybrid working.

5. Designing good homes

Example of a one bedroom apartment adjusted to be in compliance with Universal Design standards

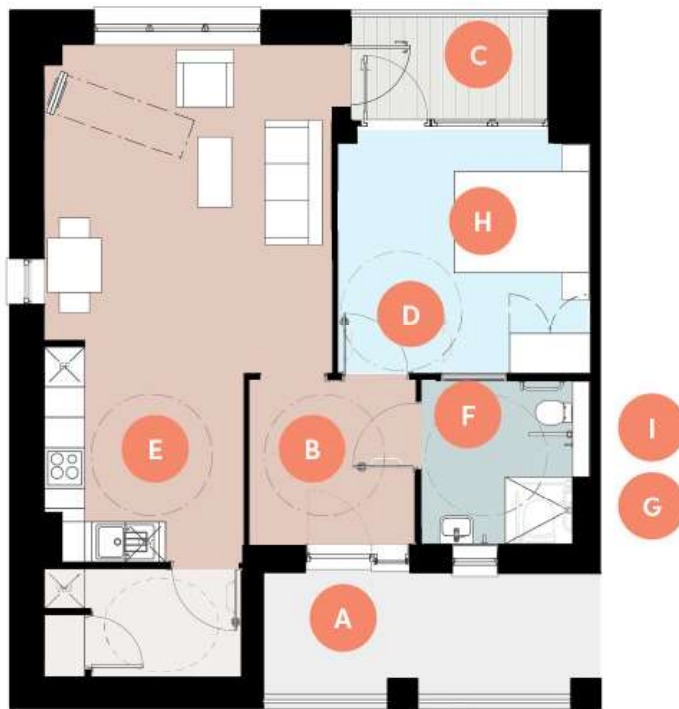


Fig.155. Typical 2 bed UD+ apartment
Cornamona, PKA architects

Providing 20%+
of UD homes is
Responds' target for
all developments

Design features that are in-line with the Universal Design approach:

- | | |
|--|--|
| A Entrance door with clear width of circa 1000mm. | F Easily adaptable with soft spots e.g. internal walls to change from two bedroom layout to one larger bedroom. |
| B Wide hallway of circa 1250 - 1500mm with storage. | G Bathroom immediately adjacent to main bedroom. Bath or shower to be adapted to suit specific users. |
| C Level access to balcony. | H Provision of hard spots e.g. in ceiling construction for hoist track to be installed in bedroom. |
| D Circa 1800 - 2400mm turning circles in all habitable rooms. | I Accessible WC. |
| E 1800mm between opposing work surfaces. | |



5.6. Housing principles: shared spaces in apartment buildings

In apartment buildings shared spaces play a key role in how tenants relate to their home as they are usually the first spaces experienced by tenants. The design of shared spaces should make tenants feel safe and welcome and create a sense of arrival.

Type of shared space

Areas to consider include:

External:

- Communal courtyards/ gardens/ roof terraces.
- Secure parking areas: courtyard/ podium (to be avoided where possible).

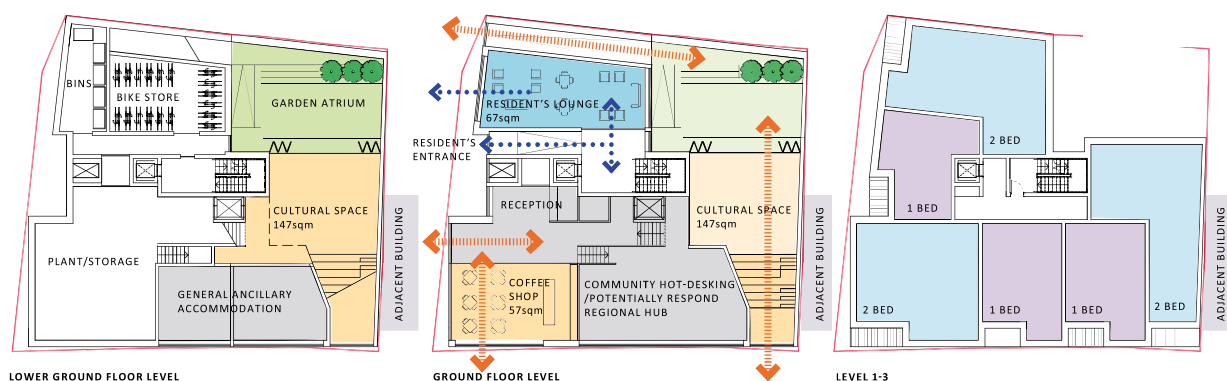
Internal:

- Postal lobbies/ atrium's/ lift and stair cores / corridors/ communal access routes

How do you create that feeling of arriving home, from the moment the tenant passes through the shared communal entrance door to their own front door?



Fig.156. Apartment building with shared communal spaces, Dublin 8
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Shared facilities:

- Community rooms with a kitchenette.
- Toilets (required adjacent to external areas serving homes where older people live).
- Communal laundries.
- Shared workshops.

Internal ancillary spaces:

- Vehicle stores (bikes/ scooters/ mobility scooters).
- Refuse and recycling stores.
- Bulky storage areas.
- Delivery drop/ collection points.

Housing principles: shared spaces in apartment buildings

Circulation and sequence space

Respond encourage best practice in regard to accessibility. Early consideration to sequence of spaces and the connecting circulation areas is essential.

Shared entrance spaces are an important part of our tenants' perception of their home and all parts of the circulation system should be:



Fig.157. Incorporating welcoming circulation space
Respond in conjunction with Ferreira Architects for EOI submission to DCC

Some best practice principles that should be considered include:

- Circulation should facilitate ease of use of communal facilities.
- Shared communal amenities should be clearly signed to encourage use of spaces, community engagement and well-being.
- Easy access to auxiliary areas will also encourage better use of facilities.
- Internal corridors should be limited in length.
- Windows should be provided in circulation spaces to reduce requirement for artificial lighting and ventilation.
- Maximum horizontal travel distance to bins of 18m.
- Well ventilated, secure bin stores.

Fig.158. Naturally lit stair
Brindle Close, Kilbarry, Respond



Housing principles: shared spaces in apartment buildings

Best practice principles for shared space

Well designed shared spaces with high quality and easily maintained finishes will encourage tenants to feel proud of their home, to take care of their new building and encourage a better sense of community integration.

Design considerations for shared spaces

Entrance lobbies: Design considerations for shared spaces



Fig.159. Well lit entrance lobby
Respond

- Should be well lit and welcoming.
- Should provide a space to shelter from the rain when entering/ leaving the building.
- Location of post boxes within a secure lobby provides additional security.
- Seating within an entrance lobby space provides space for tenants to wait for visitors, taxis or the lift, in comfort.
- Coordinate the location of fire safety management systems e.g.: fire alarm control panel and main phone point for disabled refuge systems.
- Avoid creating horizontal surfaces in lobby where items could accumulate.



Lift and stair staircores: Design considerations for shared spaces



Fig.160. Well lit core
Respond

- Should be naturally lit where possible.
- Should use durable finishes throughout to minimise maintenance.
- Staircores serving 4 or more homes must have an access control system.
- Provide 13-person lifts as standard to aid moving of furniture/ deliveries.
- Provide two lifts for any UD+ home above ground floor.
- Provide two lifts for any home accessed at seventh floor or above.
- Ensure staircores are lit naturally and well designed to encourage more active lifestyle choices.
- Include directional signage.
- Consider using an evacuation lift in any building with a lift as part of the fire strategy for the building (lifts that can be used as normal passenger lifts but can be used as a means of escape for tenants in an emergency). This builds in provision for a wider range of tenants including young families, older persons, and tenants with limited mobility.





Design considerations for shared spaces

Corridors: Design considerations for shared spaces



Fig.161. Generous corridors
Levitt Bernstein

- Generously wide corridors to be provided throughout.
- Naturally lit and ventilated wherever possible.
- Length of corridors to be kept to a minimum.
- Communal circulation should be kept to a minimum and incidental seating considered.
- Warm lighting and internal directional signage strategy is essential.
- Vision panels within doors to be in keeping with window design generally.



Access Decks: Design considerations for shared spaces



Fig.162. Well lit bedroom
Brindle Close, Kilbarry, Respond

- Considered on medium sized schemes only.
- Location should be driven by orientation (shaded side of the building) or where balconies are inappropriate (the noisy side of the street).
- 1800mm wide throughout.
- Spaces for integrated seating and planting encouraged.
- Wayfinding signage and welcoming lighting strategy is essential.
- Solid edge to deck (rather than railing) typically required unless secondary escape route is provided.



Communal rooms: Design considerations for shared spaces



Fig.163. Space for flexible use
Nethercross, Respond

- Should be as open-plan as possible to allow for multiple uses.
- Visual connections to the public realm and shared amenity should be provided where practical.
- An accessible WC should be provided adjacent to any shared space.
- Blinds or screening to be provided for privacy, to allow a greater range of activities to be held.



5. Designing good homes

Design considerations for shared spaces

Ground level shared gardens: Design considerations for shared spaces



Fig.164. Overlooked shared space
Charlestown, Respond, MCORM Architects

- Should be overlooked by the surrounding development.
- Must be accessible to all.
- Should receive good levels of sunlight.
- Must have suitable management arrangements in place.
- Must incorporate sustainable landscaping strategies.
- Should provide integrated play.
- Must provide direct secure access for maintenance equipment such as lawn mowers.
- Storage areas for some equipment may be required.
- Must provide bins including bins for dog waste.
- Must provide external taps.
- Must provide power point.
- Must provide suitable lighting.



Roof terraces: Design considerations for shared spaces



Fig.165. Safe and secure roof terraces
Charlestown, Respond, MCORM Architects

- Should maximise sunlight and reduce perceived overlooking.
- Should consider set backs to ease maintenance access and increase privacy to upper floors.
- Must provide bins.
- Must provide external taps.
- Should incorporate fixed elements of landscaping including perimeter landscaping, ground surfaces, materials and structures to reduce potential for objects thrown from height.
- Ensure safe use of roof terraces by incorporating solid edges/ angled capping on walls/ anti-climb fencing to roof guarding. Designs should allow a 2m wide non-climbable zone for young children next to roof guarding.



Fig.166. Accessible landscape
Respond EOI submission to DCC, in collaboration with Ferreira Architects



Housing principles: shared spaces in apartment building

Management of shared space

Designs which build in cost effective approaches to management help promote the long term sustainability of developments by helping to control tenant costs over the life of the development. This requires a co-ordinated approach to both buildings and landscaped areas.



Fig.167. Balancing hard and soft landscaping to allow for level access
Brindle Close, Kilbarry, Respond

All developments should consider the following design principles:

- Type of space is involved (inside, outside, entrance lobby, corridor, car park etc.).
- The size, layout and design of spaces.
- Access and security strategies (including secondary control).
- Site management strategies (use of on-site/offsite caretakers).
- Number of people using shared spaces (this is a better design indicator than number of homes).
- Type of users and the extent to which these are integrated (mix of homes, child density and whether staircores/ other spaces are shared by different tenures or tenants with special needs).
- How services are integrated.
- The quality of detailing and construction and the level of specification.
- Whether different areas within the same development are managed independently from one another.
- Whether different uses are combined in the same development and if so, the degree of separation between uses (especially between housing and non-housing in mixed-use developments).

Where a 24 hour on-site presence is not provided, the following design principles should be followed:

- Keep common areas compact and easy to manage.
- Keep layouts simple.
- Ensure high quality design and specification standards.
- Keep technology simple and easy to upgrade.
- Ensure a management plan is developed in parallel to the design.
- Avoid high concentrations of larger family homes generally, and where provided, ensure that noise activities are separated from bedrooms/ quiet landscaped areas.

5.7. Housing principles: inside the home

Empowering tenants with high quality space



Fig.168. Functional and connected living spaces
Elanora Court, Dublin, Respond, McCrosson O'Rourke Manning Architects

The design of the internal layout of new homes should prioritise the needs of the tenants and promote healthier lifestyles by using the following design principles:

Aspect:

- Maximize true dual aspect homes.
- Avoid North facing single aspect homes.
- Where single aspect homes are unavoidable they should be a small proportion of the total number of new homes.
- Consider deck access that incorporates opening windows (serving kitchens or bathrooms) facing the deck which increase daylighting and cross ventilation.

Daylighting:

- Larger windows for ground floor homes should be considered in all developments, particularly in higher-density apartment schemes.

Views:

- Layouts should include a clear line of sight from the front door to the rear garden and/ or an external window.

Private outdoor space:

- Access to private gardens and balconies must be provided from the main living space.



Staying connected

Every tenant should be connected with their surroundings and in turn their community:



Fig.169. Face painting
Baltinglass, Respond, PD Lane Associates

5. Designing good homes

Housing principles: inside the home

Internal spaces

The following internal layout design principles should be used in the development of all homes.

Arrangement of spaces: Design considerations for inside the home



Fig.170. Use of stair to provide acoustic buffering
Respond



Locate living areas and bedrooms of neighbouring homes adjacent to each other.

Locate bedrooms and bathrooms away from the main entrance where possible for increased privacy.



Consider the privacy, thermal and acoustic benefits of providing an entrance lobby.



Consider the spatial and accessibility benefits to having an open-plan entrance.

Private entrances: Design considerations for inside the home



Fig.171. Bright entrance hall
Brindle Close, Kilbarry, Respond



All homes to have generous entrance halls.



Provide a generous space at each entrance (Consider providing enough space to store a buggy, wheelchair or mobility scooter to aid future-proofing).



Provide space for storing coats and footwear in every entrance hall.

Room proportions and flexibility: Design considerations for inside the home



Fig.172. Open plan living room
Carrs Lane, Respond, Opperman and Associates



Illustrate how a full set of furniture can be accommodated within every home layout to ensure each space is fully functional, including access and activity spaces.



For homes of five or more people, provide two separate living spaces. Living rooms with separate kitchen/ diner spaces are preferred. Where these are provided they should be connected.



Open-plan kitchen/ living/ dining spaces may be considered for small homes. Proportions and window allocation should allow for open-plan spaces to be subdivided at a later date. Separate living rooms should be provided to 3bed+ homes.



Rooms with windows on just one side should be no more than 5m deep where possible to ensure good levels of internal daylight.



Wide living areas should be provided where possible to increase flexibility in furniture layouts. A minimum width of 3.2m for 1 bed, 3.4m for a 2 bed, and 3.6m for a 3 bed is recommended.



Stairs and circulation spaces: Design considerations for inside the home



Fig.175. Bright circulation spaces
Redforge, Respond, Butler Cammoranesi Architects



For houses and duplexes provide a straight stair where possible and a power source at either top or bottom of the flight to allow for a stair lift to be retrofitted.



Provide natural daylight to circulation space where practical, including use of rooflights.



Location of light fittings should be well considered and facilitate ease of maintenance without access equipment.

Ceiling heights: Design considerations for inside the home



Fig.173. Generous ceiling heights
Baltinglass, Respond, PD Lane Associates



In high-density developments, and buildings over four stories, floor to ceiling heights for ground floor habitable rooms are encouraged for better daylighting.



A minimum floor to ceiling height of 2.4m should be provided in habitable rooms on all floors above ground floor level.



Lower levels of boxing out may be accommodated if essential, but should be limited, discreet and within regulations.

Costs to be considered when reviewing ceiling heights.

Glazing heights and proportions: Design considerations for inside the home



Fig.174. Balanced window proportions
Carrs Lane, Respond, Opperman and Associates



Full height glazing should be used to connect living and external amenity spaces.



Provide direct sunlight to living, kitchen and dining areas.



Window opening sizes should be considered at early stages to ensure a wide range of suppliers are available.



Sufficient space should be maintained between ceiling and window head for fitting of curtains/blinds.



Privacy must be considered with regards to location of windows and internal layout.

Private amenity: Design considerations for inside the home



Fig.176. Well proportioned amenity
Charlestown, Respond, MCORM Architects



Private amenity space should be accessed from the main living space, and should be seen as an extension of it. Access along short edge of balcony should not be used.

5. Designing good homes

Design considerations for inside the home

Storage and clothes drying: Design considerations for inside the home



Fig.177. Ample storage
Brindle Close, Respond



Fig.178. Ample kitchen storage
Redforge, Respond, Butler Cammoranesi Architects



Fig.179. Under stair storage
Leighton Park, Levitt Bernstein



Accessible and practical storage areas should be provided.



Use built-in storage as acoustic buffer between rooms.



Locate built-in storage accessible from hallways or living spaces. Avoid general storage in bedrooms.



Use double doors to access wide storage cupboards to ease access.



Maximize under-stairs storage.



Hot presses should be provided in the upper levels of a house or within the hallway of an apartment.



Where built-in wardrobes are provided these should be sized as follows: double bedrooms 1200(w) x600(d)mm; single bedrooms 600(w) x600(d)mm. Built-in wardrobes should be provided in addition and not instead of general storage within homes, but can form part of minimum bedroom areas.



Incoming services and service controllers such as for communal heating, MVHR (Mechanical Heat Ventilation and Recovery), electrical consumer units etc. should ideally be located in the same cupboard and in no more than 2 cupboards.



Washing machines should ideally be located in cupboards accessed from the hallway or bathroom, and must not be located in kitchens where the layout includes an open plan kitchen/ living arrangement.



A dedicated utility space should be provided for homes with 6 or more bed spaces, and allow space for a washing machine and a drying rack.



Ventilated areas for clothes drying should be provided in both apartments and houses. Where this is not possible communal drying facilities should be provided.



Fixtures, fittings and services should be easy for all tenants and visitors to use regardless of mobility.



Window and door fittings should be designed to suit tenants of all ages and mobility. Heavy doors/ windows should be designed to allow retrofitting of power assisted openers.



Blinds should be provided for windows in habitable rooms in all apartments to ensure consistency at handover. Window opening including necessary safety provisions and cleaning strategies in apartments must be coordinated with blind operation.



Bathrooms: Design considerations for inside the home



Fig.180. Quality robust materials
Dovedale Avenue, Levitt Bernstein



Fig.181. Level access shower
Hazelhurst Court, Levitt Bernstein



Requirements of specific cultural groups should be considered. Bidets or a hose may need to be provided to suit local housing needs.



Level access shower is preferred. Provision of baths is project dependant, with consideration of baths to be installed in family units. Economic water consumption to be considered.



All homes should be designed to allow for a level access shower to be retrofitted to cater for changing tenant needs and allow tenants to age in place.



Durable shower doors/ bath screens and full height tiling must be used in all homes to minimize maintenance.



Shower rooms at entry level should be designed as wet rooms from the outset to allow for future flexibility.



In 2 and 3 storey homes the main bathroom should be located above ground floor. It should be easily accessible from all bedrooms. A toilet should be provided on every floor with 2 or more bedrooms.



Windows should be provided in bathrooms to provide natural light and ventilation where practical.



Bath and shower seal details should be robust to mitigate leaks caused by movement.



A shower room should be provided in addition to a bathroom for homes with more than 3 bedrooms.

Bedrooms: Design considerations for inside the home



Fig.182. Well lit bedroom
Dovedale Avenue, Levitt Bernstein



Furniture layouts should ensure ease of access to windows and views to the outside from the bed. Desk to be provided in each bedroom, including socket.



Window proportions should be designed to balance light and privacy. Use of full height windows should respond to context/privacy.



Space for a desk to enable an adult tenant to work from home should be provided in addition to desks for children.



Wardrobes should not restrict daylight from windows to improve light levels and reduce reliance on electric lighting during the day.

Kitchens: Design considerations for inside the home



Fig.183. Hard wearing kitchen
Ballaghderg, Respond, John McCay (Architect)



Kitchen layouts should use 'U' or 'L' shaped layouts where possible to aid ease of use.



Hard wearing and easy to maintain materials should be used for all worktops and flooring.



Kitchen worktops should be sealed to walls with flexible water proof seals to prevent damage.



Usable worktop space and cupboard storage volumes must reflect the number of tenants in the home. Worktops must not be obstructed by wall cupboards.



Ensure location of appliances is carefully co-ordinated with cupboards. Allow adequate worktop space either side of hobs. Group sinks/ dishwashers to minimize service runs.

Checklist

1. Check	2. Check	3. Check	4. Check
5. Check	6. Check	7. Check	8. Check
9. Check	10. Check	11. Check	12. Check
13. Check	14. Check	15. Check	16. Check
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89. Check	90. Check	91. Check	92. Check
93. Check	94. Check	95. Check	96. Check
97. Check	98. Check	99. Check	100. Check





6. Supporting communities

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6. Supporting communities



Fig.185. Services supporting, connecting and activating communities
Respond in conjunction with Ferreira Architects for EOI submission to DCC

//

I never knew that there was somewhere like here that gives this type of support.

//

Service user, Respond Family Homeless Service, Firhouse, Dublin



6.1. Introduction to supporting communities

The provision of support services for their tenants in addition to housing forms an integral part of Responds work.

All communities need areas for individuals and groups to feel supported and secure as well as feeling connected and included as part of the local community.

Spaces for support services allow for social connections to be formed and can act as tools for genuine social interaction. These spaces should be considered within any design of new schemes and alterations to existing buildings at early master planning stage.

Support services principles include:

- Facilitating independent living.
- Embedding services into the local communities.
- Providing a strong community infrastructure.
- Providing strong connections with the outside to boost mental health and well-being.



Fig.186. Keeping connected
Respond, Nethercross older persons daycare

6. Support Services

6.2. Designing daycare facilities for older people



Respond's older persons daycare facilities support independent living in homes for as long as possible, with confidence security and dignity. Our high quality daycare services are available to both Respond tenants and those in the wider community, and provide areas to socialise, contribute to the community, combat loneliness and eat together.

Fig.187. Providing familiar spaces for interaction
Dovedale, Levitt Bernstein

Best practice design considerations for social infrastructure should be reviewed at all stages of the design process.

Design teams should refer to scheme specific requirements along with the following:

- The guidance collated in collaboration with the Global Brain Health Institute.
- Universal Design principles.



Fig.188. Spaces for interaction with other age groups
Dovedale, Levitt Bernstein



Older persons daycare external space considerations

The following principles should be followed:



Integrated drop-off points should be incorporated into the landscape.



Parking for staff or close public transport links must be provided.



Secure sensory gardens are essential. Courtyard gardens are preferable.



All facilities should have level access and be wheelchair accessible.



Visual links to gardens from internal spaces should be provided.



Secure entrance lobbies should be provided.

Design of external spaces for older persons daycare should focus on providing inviting and easily accessible spaces.



Fig.193. Protected courtyard garden
Hazelhurst Court, Levitt Bernstein



Distinct spaces.

Familiar flower and plant types.

Fig.194. Areas to sit and enjoy the outdoors
Airmount community garden, Respond



Fig.189. Parking
Older persons daycare, Respond



Fig.190. Level access pick-up
Older persons daycare, Respond



Fig.191. Clear routes
Community Garden, Respond

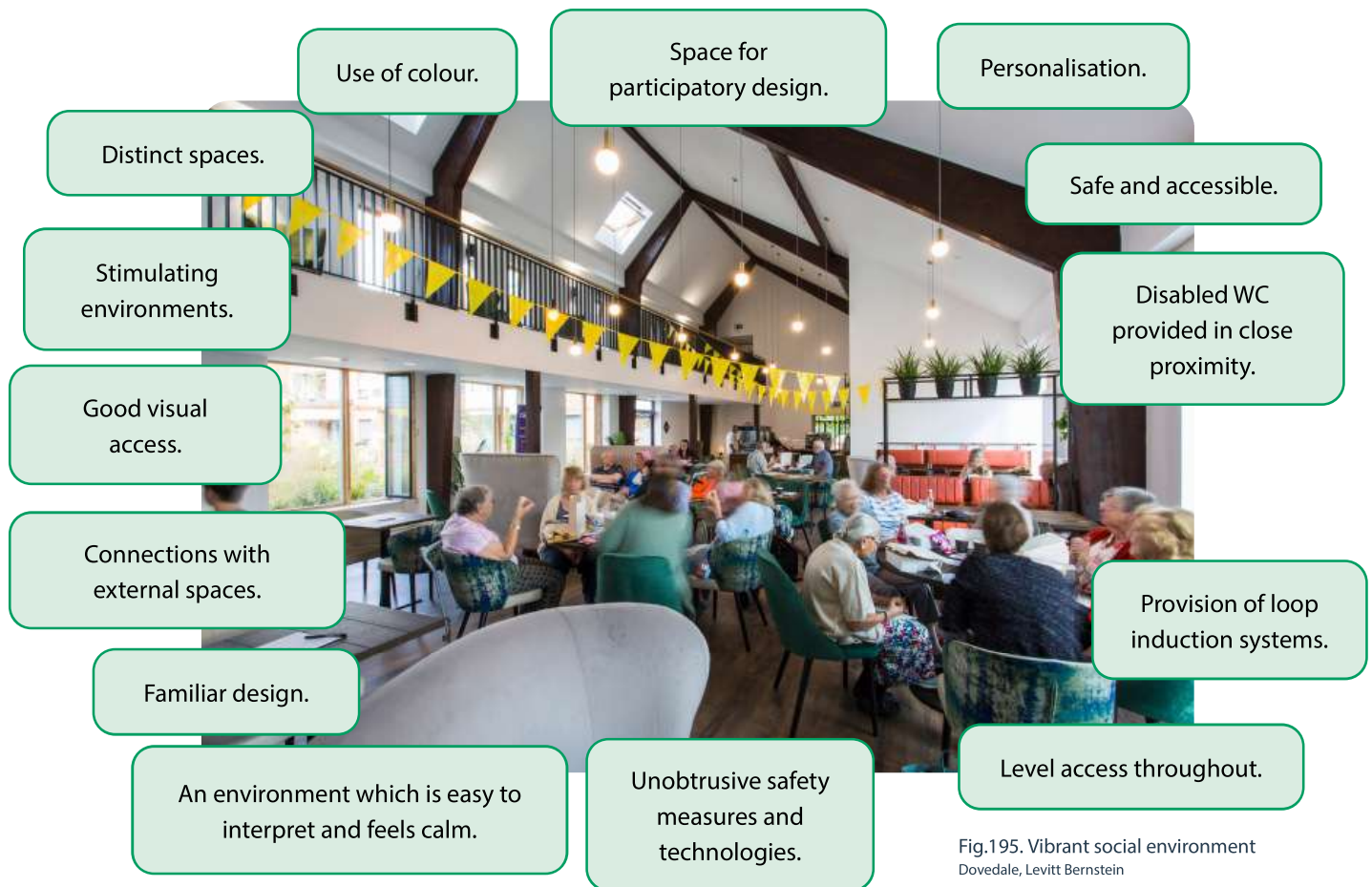


Fig.192. Activity areas
Community Garden, Respond

6. Support Services

Designing daycare facilities for older people

Older persons daycare internal space considerations



Older persons daycare internal space design principles:

- Spaces should be light, bright, warm and inviting.
- Windows between rooms should be provided, allowing for flexibility of use. Privacy blinds should also be included.
- Spaces should align with UD guidelines for dementia friendly design.

Specific areas which should be provided include:

- Area for entertainment activities (bands/ performances).
- A large bathroom with a hoist accessed bath.
- Multi-use room for hairdressers, podiatrist and occupational therapists consultations.
- Office, meeting room and welfare areas for staff.



Fig.196. Organised activities
Respond, Nethercross



Fig.197. Memorable objects
Respond, Nethercross



Fig.198. Hairdressers services
Respond, Nethercross



Fig.199. Digital connections
Levitt Bernstein



6.3. Dementia friendly sensory gardens

Design principles for dementia friendly gardens include the use of:



Fig.200. Sensory and protected gardens
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Recognisable plants.

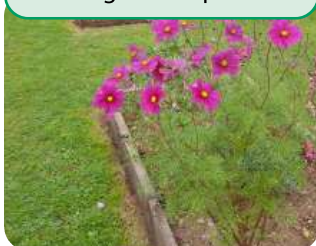


Fig.201. Allotment
Respond



Clear paths.



Fig.202. Dovedale
Levitt Bernstein



Areas to sit.



Fig.203. St John's College
Respond



Objects of interest.



Fig.204. Airmount Allotments
Respond



Familiar trees.



Fig.205. Allotments
Baltinglass, Respond



Opportunities to interact.



Fig.206. Community gardening
Baltinglass, Respond



Visual connections to the indoors.



Fig.207. Hazelhurst Court
Levitt Bernstein

The 12 Inclusive Design Principles for People living with Dementia as set out in the Placemaking Chapter should be referred to.

6.4. Designing for childcare facilities



Respond provides high quality childcare facilities, and is one of the nations largest community providers. All facilities should be safe nurturing and stimulating environments, to provide a co-learning opportunity between the family and home setting.

Fig.208. Main teaching space
Hilltop childcare, Respond

Carefully consider the location at early design stage; locate attractively within overall development, maximising visual links to open spaces and landscaped areas, avoid proximity to major traffic routes and ensure quality pedestrian links to all residences. Consider co-location adjacent to community facilities but with separate access points.

Respond operates within the Access and Inclusion model which facilitates all children including those with additional needs accessing services.

General requirements:

- Design for dedicated full day childcare facility (i.e. no dual use as community space).
- Minimum size of facilities to accommodate 65 Children in age range from 0-12 to ensure high quality facility for both children and staff.
- Consider how the spaces will perform in all weathers, from morning to evening and through all 4 seasons.
- Strong links to quality outdoor spaces including natural elements is essential.

Design teams should refer to:

- The Universal Design Guidelines for Early Learning and Care Settings (Dept. of Children and Youth Affairs)
- Childcare Facilities-guidelines for Planning Authorities June 2001 Government of Ireland
- Tusla (2018) Quality and Regulatory Framework; Full Day Care Service and Part Time Day Care Service, Dublin: Early Years Inspectorate, Tusla.
- Childcare Act, 1991 (Early Years) Regulations - 2016
- ChildCare (Pre-School Services) Regulations (S.I No 398 of 1996)
- Childcare (Pre-School Service) Amendment Regulations 1997(S.I No 268 of 1997)

External space design for Childcare facilities

Context:

Ensure facility is easy to locate within the development and is well connected by a network of sustainable travel options – footpaths, cycleways, links to public transport, safe areas and some parking, including vehicular, bike, cargo bikes and scooters. Consider secure refuse storage and collection locations.

Entrance:

A well-defined generously sized welcoming entrance with provision externally for informal gathering/ seating in vicinity of entrance at drop off and pick up times. Avoid inactive facades to surrounds. Consider including calming sensory planting.

Welcoming entrance lobby to include for security and staff oversight with a vision panel between office and lobby.

Internal:

Provide a variety of spaces that are bright and well lit by natural light to allow for:

- Both quiet and sensory activities.
- Meal times.
- Physical activity.
- Group spaces.
- Individual spaces.

Consider acoustic environment, lighting environment and variety in finishes.



Fig.209. Safe areas to play
Respond

6.5. Quality outdoor spaces are essential to providing quality all day child care

Considerations to include:

Boundary conditions

A high boundary fence, or wall to provide safety and security for external play area is essential. Consider including boundary planting. Allowing some transparency and views out for children of the horizon beyond.

Protecting amenities

In high density developments, ensure risk of any items dropping from balconies to play area below is mitigated by balcony design or protecting play space immediately below balconies.



Connecting spaces

Maximize number of level access connection between main rooms and outdoor space. Design doors so they can be safely kept in open position in Summer i.e. open back against façade to avoid doors protruding into play space.

CCTV and Fire safety

Access control system and CCTV should be integrated throughout. Include fire escape gate in perimeter boundary which must be secure and linked to fire alarm system and must also have fob access. (key pad not to be installed)

External shelter

External shelter/ pavilion, or overhang from building above should be included to allow outdoor play in all weathers.

Storage

Incorporate external equipment storage shed imaginatively into the design.

Specification

A mix of hard and soft landscaping should be provided, including natural elements, providing physical and challenging experiences. Provide areas for children to plant flowers and vegetables. Include a fruit bearing tree. No bark or pebbles to be used. Provide External water point and drain and lockable water butt.

Fig.210. Soft landscaping with direct access to primary internal spaces
Levitt Bernstein

Childcare facilities internal spaces design principles:

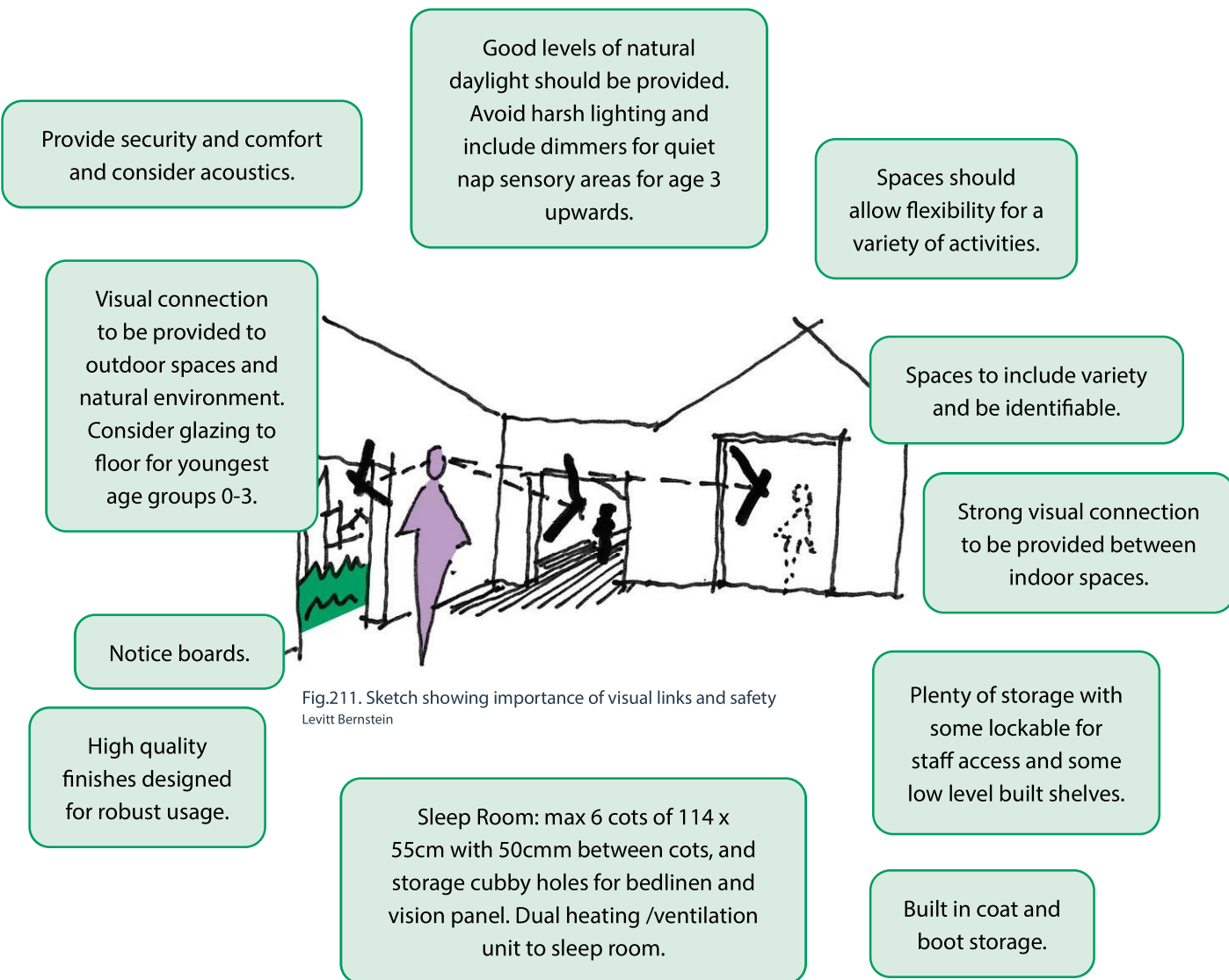


Fig.212. Views to outdoor play areas
Hilltop Childcare, Respond



Fig.213. Storage accessible to children
Hilltop Childcare, Respond



Fig.214. Flexible teaching space
Hilltop Childcare, Respond



Fig.215. Small scale safe space
Levitt Bernstein



Connection with other facilities:

- Provide separate networking space for families externally at the entrance to the childcare facility which can be adjacent to the entrance to the community facility community.
- Avoid or minimize areas of inactive frontage facing the street and consider passive surveillance as facility will be closed every evening and at weekends. Consider low levels of external lighting at these times.

Staff:

Our high quality childcare relies on our valued staff. Essential to ensuring a good quality staff environment is a dedicated attractive break area and office space for staff to interact privately with a parent or carer. Include space for staff lockers and a designated W.C.. Staff intercom system for internal communication between rooms

Childcare facilities internal space considerations:

2 playrooms are required as a minimum, optimum size is 5 rooms as follows:

Playroom size guide summary (after school 6-12 year olds can be accommodated within this room mix.)

Sanitary and safety:

- Provide vision panels between W.C./changing areas and playrooms.
- Include staff sink and W.H.B. for children in each room.
- Fit high level handles to entry doors and finger guards on all doors.
- No push bar fire exit doors to be used – all fobbed and linked to fire alarm.
- Commercial grade Kitchen.
- Ventilated sluice room and laundry – not to be located in playroom.
- Provide adequate secure storage for cleaning equipment.

Room	Age range	Capacity	m ² per child	Room size m ²	Access to WC off room	Access to nappy changing room	Access to sleep room	Access to outdoor space
1	1-2	10	2.8	33	no	yes	yes	yes
2	2-3	12	2.35	35	yes (1)	yes	yes	yes
3	2-3	12	2.35	35	yes (2)	yes	yes	yes
4	3-6	16	2.3	50	yes (2)	no	no	yes
5	3-6	22	2.3	50	yes (2)	no	no	yes
Total:		72						



Fig.216. Hilltop Childcare,
Respond

6. Support Services

6.6. Designing for family support services and community spaces



Respond provides community spaces for family support which are accessible, comfortable and child friendly. These spaces require access to cooking facilities for cookery classes, and bathroom facilities to suit the size of the space.



Fig.218. Engaging all ages
Community gardens, Respond



Fig.217. Spaces for cooking and interacting
Respond Family Support Services

Design teams should refer to:

- The guidance collated in collaboration with the Global Brain Health Institute (GBHI).
- Best practice design considerations for social infrastructure to be reviewed at all stages of design.

Spaces should be welcoming and homely, and include the following:



Easily accessible and visible.



Safe spaces that aren't visible from the public realm.



Safe areas for children to play.



Interactive activity zones for cooking/ arts and crafts.



Staff welfare facilities.



Private rooms for more discreet 1-to-1 conversations.



'Home office' space fitted with appropriate technologies to provide opportunities for learning new skills.



Fig.219. Community football Game
Lucan, Respond



Fig.220. Polytunnels
Airmount community gardens, Respond





7. Asset management

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7. Asset management



Fig.222. Creating high quality developments
Respond in conjunction with Ferreira Architects for EOI submission to DCC

// In seeking to improve lives, Respond will place our tenants at the centre of our work, focusing on proactive tenant engagement, tenancy management and asset management to ensure positive outcomes and tenant satisfaction.

//

Respond Strategic Plan 2022-2024



7.1. Introduction to asset management

Respond's aspiration is to create a legacy of homes and services for communities which age well as sustainable assets for generations to come.

Asset management and maintenance reviews should be carried out throughout the design process for developments.

Following scheme completion, post scheme reviews with Respond's Asset Management team should be carried out to evaluate the scheme delivery process and identify 'lessons learnt' to help inform future developments.

Asset management principles include:

- Using high quality durable materials.
- Incorporating robust detailing.
- Using a sustainable balance between capital costs and running costs.
- Ensure the safety of staff and tenants by reviewing maintenance and replacement procedures as part of the design process.
- Achieving high quality workmanship through the use of careful monitoring during construction.
- Involve tenants in the management of their external areas and green spaces in all developments where possible.



Fig.223. Considering building and grounds maintenance
Beechwood, Respond, Donnelly Turpin Architects

7.2. Life cycle costings and maintenance

Respond aspire to produce high quality buildings that provide housing and support services for existing and future tenants. Life-cycle performance targets and assessment management assumptions for each scheme should be clearly set out at the start of each project.

Good design and quality materials should also be used to encourage people to take pride in and better care of their surroundings, which can reduce maintenance requirements.

Maintenance is a significant cost over the lifetime of a development. All projects will need to balance benefits to tenants and the wider community with running and maintenance costs. Life cycle costings should be carried out as part of any viability assessment prior to construction.

Early engagement with Respond's Asset Management team during design/ negotiation stage must be carried out to ensure proposed designs are cost effective to manage.



Public realm maintenance



Fig.224. Balancing hard and soft landscaping
Kingswood, Respond

- Roads and footpaths should be taken in charge on all projects where practical to reduce longer term maintenance cost. This approach must also be balanced at design stage against the need to create high quality public realm areas (where included in the scheme) which may preclude being taken in charge in order to secure an appropriate range of materials.
- Public realm materials should be chosen to reinforce visual links between new developments and the surrounding area to encourage the integration of new tenants with the wider community and promote connections/ walking routes through new developments.
- Outdoor taps should be provided to facilitate cleaning and bins to public spaces should be provided.



Soft landscaping maintenance



Fig.225. Careful placement of soft landscaping
Beechwood, Respond, Donnelly Turpin Architects

- Plants specification should be suitable for environmental site constraints e.g. drought or flood resistant plant varieties.
- Plant specification must be based on a thorough understanding of maintenance requirements to ensure appropriate plant selection to suit site conditions and management approaches.
- Planting beds should be used to help structure soft landscaping and reduce uncontrolled spread of plants.
- Dense initial planting should be used where viable to help reduce the need for maintenance and help plants establish more quickly.



- Use of native plant species is encouraged
- Plants used for defensive or anti vandal purposes must be robust.
- Locate areas of grass in areas that receive good sunlight to promote healthy growth.
- Stone chippings and bark should not be used.



Fig.228. Considering the life cycle of the wider environment
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Window cleaning



Fig.226. Considering building height along side cleaning strategy
Kingswood, Respond, Crawford Architecture

- Ensure operation and cleaning can be carried out safely by all tenants.
- Options for opening and cleaning must be considered and agreed at early design stages.
- Abseiling should be avoided apart from in exceptional circumstances.
- House: design must allow tenants to safely clean all windows.
- Apartments: An apartment strategy should be agreed in advance of occupation for each apartment development by Respond. Where possible the design allows tenants to safely clean all windows, but managed solutions may be developed where agreed on a site by site basis.



Plant access and replacement



Fig.227. Efficient plant room design
Levitt Bernstein

- Safe and clear access to plant must be provided and incorporated at early design stage.
- Large items of plant should be located at ground floor or basement.
- Where larger items of plant are located on upper storeys or at roof level, fixed stair access must be provided to allow ease of regular inspection. Use of cranes for replacement of plant should be avoided apart from exceptional circumstances.
- Plant for non-residential uses must be independently accessed and metered in all projects.
- A dedicated communications room for broadband intake should be provided in all developments.
- Space for sprinkler tanks should be provided in all apartment buildings to facilitate either initial installation or ease of retrofitting in future.

7. Asset management



Cleaning of communal areas



Fig.230. Finishes and fitting to allow for ease of cleaning
Nethercross, Respond

- All communal areas must have power outlets provided to aid cleaning.
- Isolation switches for sockets in public areas should be provided and located within secure stores.
- Outdoor taps should be provided in external communal areas and must be provided in all cycle and bin store rooms along with gullies to facilitate cleaning.
- Fully enclosed bin stores must be ventilated and should not lead smells to play areas, nearby windows/ doors etc. Consider mechanical extract where needed. Both internal and external bin stores should be lockable and provided with sluice cleaning facilities.



Facade maintenance strategies



Fig.231. Consider maintenance of varying materials
Respond

- A schedule of care and repair must be produced for all buildings to manage cost and disruption to tenants and consideration of access for maintenance such as painting and re-pointing must be considered at early stages of design.
- Where scaffolding and/ or MEWP access is required access routes within the landscape design should be identified early in the design process.
- Windows on upper floors should be designed to be replaced from within the building to reduce the risk of falls from height during replacement.



Gutter and roof maintenance



Fig.229. Roof access and safety systems
Carrs Lane, Respond, Opperman and Associates

- On apartment buildings, roof mounted plant which requires regular inspection should be accessed via a fixed ladder to aid access. Roof areas without plant should be accessed either via a stair or a fixed inclined ladder. Roof hatches without fixed ladders should not be used.
- Fall prevention measures should be designed in from the outset and should include 1100mm(h) parapets or fixed guardings.
- Gutter grilles must be used in areas with trees to reduce the risk of blocked downpipes.
- A reach of no more than 500mm should be assumed from a safe maintenance zone to a rainwater outlet/ hopper.
- Where access towers are assumed for gutter maintenance a hard standing zone at least 1200mm deep must be provided to enable safe access.



7.3. Considerations for robust design

Materials and detailing

The specification of materials, durability and security should be considered holistically. Higher quality, robust materials will retain a positive visual appearance throughout the life of a development and will help keep areas safe and secure for tenants and users.

Careful detailing is required to minimise staining and uneven weathering. External painting will only be acceptable in easily accessible areas, and should avoid specialist access for maintenance.

Materials with increased durability should be used in high trafficked areas, such as entrances, lobbies etc. where there is more exposure to the elements and/ or increased footfall.



Fig.232. Using high quality complementary materials
Carrs Lane, Respond, Opperman and Associates

INCREASED DURABILITY IN MATERIALS & DETAILING REQUIRED

Private Internal space	Private internal Internal space	Shared communal internal space	Shared communal external space	External public areas	External public areas
Dry uses	Wet uses	Light footfall	Heavy footfall	Light footfall/ sheltered to the elements	Heavily trafficked/ exposed to the elements

Standardisation

Standardisation can reduce maintenance costs on projects through ease of spares storage and training for maintenance staff.

Where appropriate, the range of suppliers for common components should be kept to a minimum within maintenance districts. This must be co-ordinated with procurement strategies at tender stage.

Respond encourage specification of common sizes of components such as sinks and WC's to facilitate replacement should it be required at a later stage.

Documentation

Clear and complete documentation must be agreed throughout the design process and as a minimum should include:

- Tenant Handbook covering use of new homes including services. Consider provision of instruction videos.
- Operation and Maintenance Manuals for use by Respond's maintenance teams.
- Safety files.

7.4. Improving existing properties

All topics covered in the design guide provide general guidance on best practice development principles. These should be used to help review proposed improvement works to existing homes and spaces. In addition the following principles must also be considered:



Improving tenants comfort and accessibility.



Reducing energy consumption and emissions.



Reducing fuel poverty.



Improving internal layout and design.



Fig.233. Improving existing buildings and expanding neighbourhoods
Beechpark, Respond, Donnelly Turpin Architects

Improving access

- Incorporate lifts where possible to provide level access.
- Improve level access to ground floor homes.
- Incorporate an accessible WC at entrance level for visitors.

Incorporating flexible spaces

- Consider creating open-plan living spaces with options for dividers, or sliding doors.

Exploring options for access to external space

- Ensure ground floor gardens can be accessed by all.
- Assess if balconies or roof terraces can be added.
- Provide access to other areas of semi-private amenity space in the immediate locality.

Net Zero

- Retrofitting existing housing buildings to meet Net Zero Energy targets should be explored on all projects.

Sustainable and future-proofed energy strategy.

- Remove fossil fuels.
- Incorporate low carbon technologies and renewable energy such as heat pumps and PV's.
- Incorporate Smart controls.
- Locate thermostat in appropriate locations.
- Reduce service runs and lag all heated pipes.
- Provide infrastructure to sell surplus electricity back to the grid.
- Ensure comprehensive training/ instruction materials are provided to Respond for all Tenants to ensure the proper operation of all systems.



Fig.234. Improving existing communities
Milfield Cottages, Respond





8. Value for money

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8. Value for money



Fig.236. Building quality homes
Beechpark, Respond, Donnelly Turpin Architects

“ Conscious at all times that we utilise state-backed loans and tenants’ rental income to finance our building and service delivery programme, we ensure that all our expenditure and investment provides a clear value for money with evidence-based, testable outcomes. ”

Respond Strategic Plan 2022-2024

8.1. Introduction to value for money

Good design balances longevity and construction costs to ensure that all projects deliver value for money over the lifetime of the project.

The financial constraints/ budget for each scheme should be clearly set out with the design team at the start of each project. Early engagement with Respond should be carried out by the design team to identify key scheme constraints/ future targets and to test the viability of scheme goals against funding criteria. This process should result in the development of a detailed scheme brief and viability report at the end of the master plan stage.

Detailed design should use the principles set out in Chapter 2: Sustainable communities, and the subsequent design chapters to ensure that good design is used to ensure that each development achieves best value for money over the life of the scheme against the specific goals set out for the project.

Respond take pride in:

- Buildings built to last at least 60 years.
- Providing for the changing demographics of Ireland and maximizing inclusivity.
- Respond's vision that all of developments have a provision of 20% of UD units.
- Future proofing against climate change.

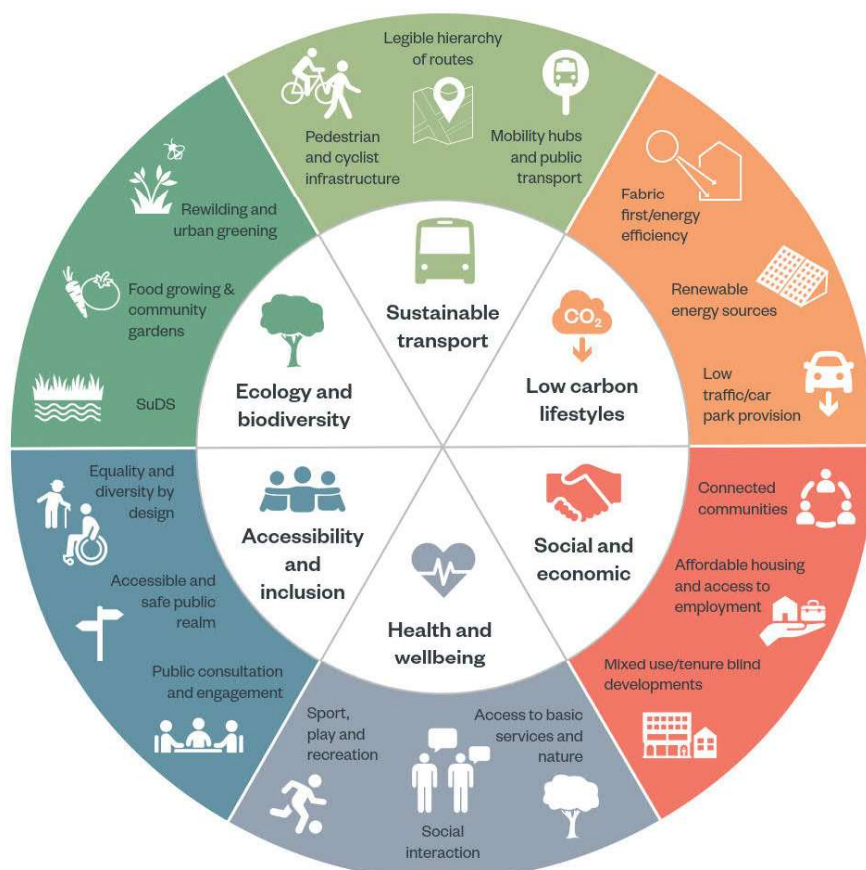


Fig.237. Sustainability tool kit
Levitt Bernstein

8.2. Designing for longevity, flexibility of layout and lifetime homes

All developments represent both a long term financial investment and a commitment by Respond to their tenants and service users. As such, investment strategies for developments should seek to maximize the benefits both financially and in terms of benefits to tenants over the longer term. Design strategies should therefore seek to test the value of investment approaches at construction stage over the life of a development. By setting out clear objectives with scheme teams at the start of each project, design teams can then design in long term strategies for the project.

Design principles for longevity that may need to be considered as part of any development include:

- Designing places that create a sense of belonging and work in harmony with the surrounding context.
- Bolstering connection with nature and supporting biodiversity, and improving well-being of Tenants.
- Designing to Lifetime Homes principles.
- Targeting Higher Universal Design requirements.
- Using durable materials and robust detailing.
- Building in flexibility for future adaptations. eg. adding level access showers in place of baths, or making provision for future extension to roofspace/ attic conversion.
- Building in resilience for future climate mitigation measures which may be needed.
- Using modular systems and offsite construction.
- Design not only to meet but exceed minimum statutory requirements where financially viable over the life of the project.

The target design lifespan for the building fabric of all new developments must be discussed with Respond at inception stage of every project.

Respond promotes building for longevity, and encourages ongoing discussion for providing a sustainable future through consideration of whole life carbon and circular economy.

The figures below illustrate minimum targets but Respond encourage longer lifespans to be considered where viable.

Element	Minimum life span required
Structure	60 years
Floors	60 years
Walls	60 years
Roofs	60 years
Cladding	60 years
External windows and doors	30 years
Heating, mechanical and renewable systems	20 years
Plumbing	40 years
Sanitary ware	40 years
Electrical services	40 years
Kitchen cabinets and worktops	20 years



Fig.238. Improving existing buildings and expanding neighbourhoods
Baltinglass, Respond, PD Lane Associates

8.3. Financial considerations

Individual projects will have a variety of financial considerations to balance such as land acquisition costs, funding models (including emerging models such as Cost Rental approaches), scheme financing, design and

construction costs and enabling costs such as disruption costs for existing tenants. Key financial constraints for a scheme should be set out with design teams to ensure that scheme briefs and viability assessments capture all key financial requirements.

8.4. Balancing construction and maintenance costs

All developments should seek to be designed to minimize the overall construction, running and maintenance costs of a development over its lifetime while delivering quality developments. This approach will need to be balanced against initial funding availability but should be used to inform approaches to materials, energy strategy and maintenance in particular.

As traditional building methods become increasingly expensive and difficult to manage quality, factory built/ component building methods may provide a more economical solution, as they are able to provide quick delivery, ease of construction, reduction of on-site time of skilled and unskilled labour, warmer, more airtight building, less waste, and more environmentally friendly solutions. They will not be appropriate for all developments due to specific scheme and site constraints, but should be

considered on all projects as a potential way to minimize construction costs. Consideration of the capacity of the construction industry and availability of skills should form part of any review of these construction approaches, and single supplier solutions should be avoided/ minimized.

Due to the extended time periods involved in running and maintenance periods it is essential that the design of all developments seeks to minimize long term running and maintenance costs. Whilst strategies will be informed by construction budgets, strategies should always aim to design out costs where possible, such as using fabric first approaches to building design, avoiding the need for expensive access equipment for cleaning and plant replacement. Each chapter of this guide provides advice on cost effective design approaches for all aspects of a scheme design.

8.5. Lifetime Home principles

The Lifetime Homes concept provides value for money by ensuring that homes are designed to meet the changing needs of a wider range of tenants over the lifetime of the development without the need for expensive alterations. This is based on five overarching principles.

- Inclusivity.
- Sustainability.
- Accessibility.
- Good value.
- Adaptability.

Respond's vision is that homes should be as inclusive and adaptable as possible. Respond commit to making 20% of their homes to Universal Design standards to ensure that they can accommodate every cohort of society.

The Foundation for Lifetime Homes and Neighbourhoods suggests that:

"Lifetime Homes make life as easy as possible for as long as possible because they are thoughtfully designed. They provide accessible and adaptable accommodation for everyone, from young families to older people and individuals with a temporary or permanent physical impairment.... Bringing Lifetime Homes design into the general housing buildings should, over time, allow older people to stay in their own homes for longer, reduce the need for home adaptations and give greater choice to disabled people who cannot achieve independent living due to lack of suitable housing."



Fig.239. Improving existing buildings and expanding neighbourhoods
Baltinglass, Respond, PD Lane Associates



respond
building homes,
improving lives



9. Implementation

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9. Implementation



Fig.241. Creating and supporting thriving communities
Respond in conjunction with Ferreira Architects for EOI submission to DCC

// Respond are focusing on proactive tenant engagement, tenancy management and asset management to ensure positive outcomes and tenant satisfaction. //

Respond Strategic Plan 2022-2024



9.1. Introduction to implementation

Respond is dedicated to producing high quality homes and services that meet the changing needs of communities.

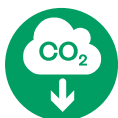
Working alongside developers and local authorities, Respond will continue to create a positive and sustainable future for those in need. The 11 points illustrated on p.9 of this guide set out Respond's vision and aspirations for all new developments and should be used to inform the development of all new projects including those involving the retention/ upgrading of existing buildings and spaces.



Equality



Support



Sustainability



Affordability



Biodiversity



Efficiency



Quality communities



Durability



Quality design



Safety



Innovation

Working with the wider community, Respond will continue to:

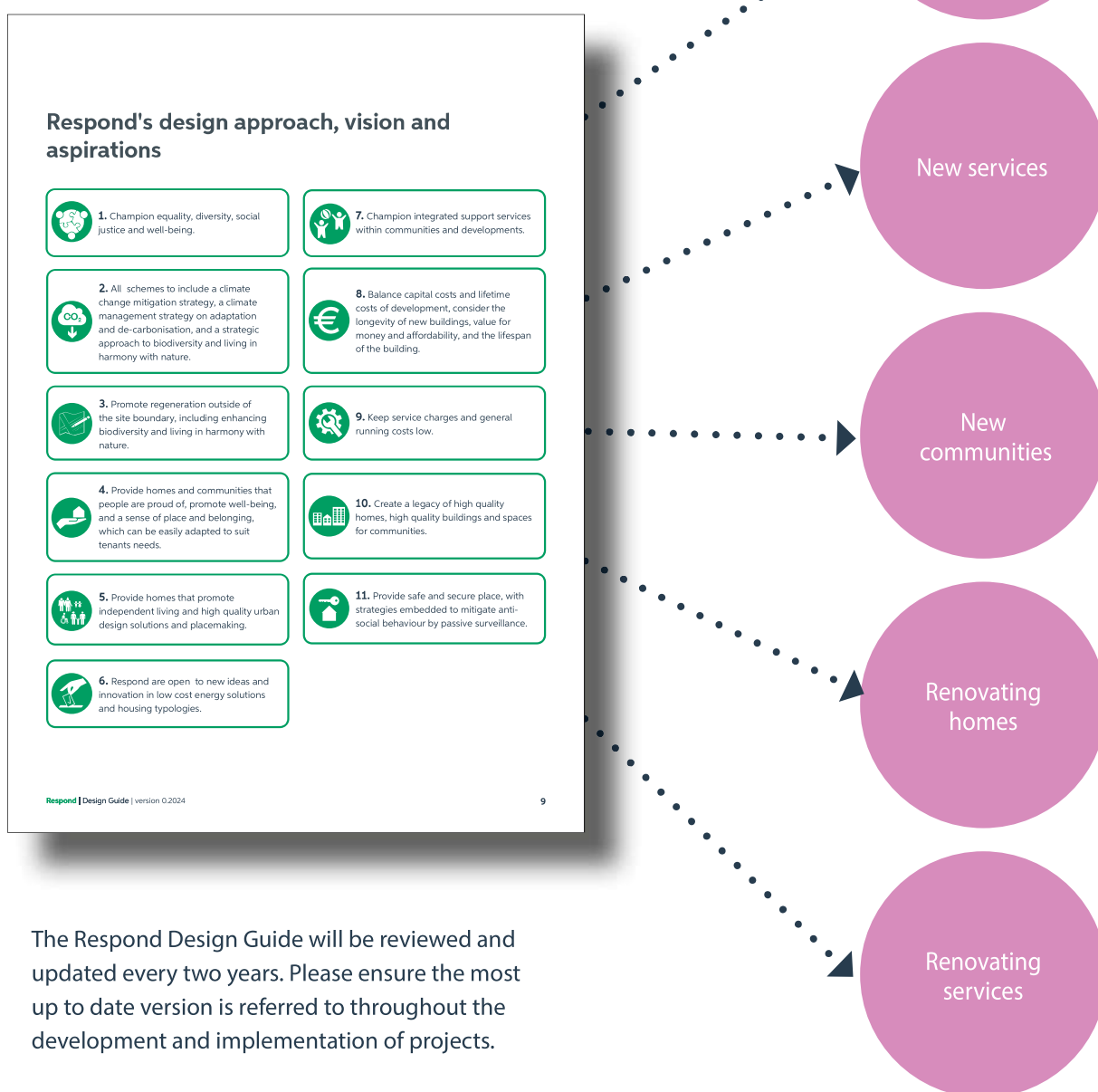
- Establish and maintain vibrant, socially integrated communities.
- Advance education among tenants.
- Promote social justice purposes that are beneficial to the community.
- Prevent and relieve hardship and distress amongst those who are homeless and amongst those in need who are living in adverse housing conditions.



Fig.242. Creating spaces for future generations
Healthy Waterford Activity, Respond

9.2. Embedding Respond's design approach, visions and aspirations

An early collaboration meeting between all design parties, collaborative partners and stakeholders should be held and key targets identified for the scheme against each of the 11 principles of Respond's stated design approach, vision and aspirations.



The Respond Design Guide will be reviewed and updated every two years. Please ensure the most up to date version is referred to throughout the development and implementation of projects.



9.3. Reflecting Respond's core values in every project



Respond's core values as set out in the Strategic Plan should also be referred to by all scheme stakeholders. These values should also be embedded into any scheme brief.

- Listening.
- Trust.
- Sustainability
- Empathy.
- Integrity.
- Value for Money.
- Quality Design.

Section 4 | Mission, Vision, Values and Guiding Principles

Our Core Values



Listening

We will consult with and listen to our tenants, service users, and staff. We will reflect on their opinions in the planning, design and delivery of housing and housing support services.



Trust

We will aim to be a trusted and dependable social landlord to our tenants and service users, a trusted partner for those with whom we collaborate and a trustworthy employer for Respond employees.



Sustainability

All our developments will endeavour to enhance the natural world around us and not adversely impact the environment without redress. Through the design of our housing and communities, we will be mindful of our ethical obligations to pursue national goals of sustainable development through energy efficiency and the reduction of carbon emissions.



Empathy

In all our work, we will try to see the situation from the point of view of the tenant or the community with which we are engaging; we will be non-judgmental, regardless of past or current difficulties. We will listen to and value their stories and experiences and endeavour to have a positive influence on their lives.



Integrity

Honesty, truthfulness and transparency of purpose and method will be our constant watchwords.



Quality design

All our developments will be based on principles of place-making and creating sustainable and safe living environments. We will seek to follow best practices to deliver integrated housing developments designed to high-quality standards capable of being used by all, including those with specific needs.



Value for Money

Conscious at all times that we utilise state-backed loans and tenants' rental income to finance our building and service delivery programme, we ensure that all our expenditure and investment provides a clear value for money with evidence-based, testable outcomes.

Strategic Plan 2022-2024

43

Fig.243. Extract from Respond's Strategic Plan 2022-2024





10. Respond projects

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10.1. Case study: Rathcoran, Baltinglass, Co. Wicklow

PD Lane Associates



Rathcoran, Baltinglass

Co. Wicklow

This project is an exemplar in terms of regeneration of existing building stock and renewal of same to form a sustainable community. Within the scheme there are 56 homes including 8 which are owned and managed by another provider. The site is located within walking distance of the main street in Baltinglass and within close proximity of a variety of schools, employment centres, and recreational amenities. Rathcoran offers

residents proximity to services, a core principle of the 15-minute city concept. There is a primary healthcare centre on site and a large amount of communal green space as well as an enclosed all-weather multi use games area. Capital Advance Leasing Facility funding from the Department of Housing, Planning and Local Government, and private finance from the Housing Finance Agency in partnership with Wicklow County Council facilitated the development.

The development was delivered in two phases in June and August 2021. Tenants began moving in to Phase 1 in June 2021 and the remainder when Phase 2 was delivered in August 2021.

The 56 homes sit alongside a range of modern homes and apartments, and a primary healthcare centre. A converted convent building forms the heart of the development. Due to the mix of unit types and sizes, there is a broad mix of individuals and families of all ages.





The scheme has a large amount of communal green space as well as an enclosed multi-use games area. It is located within a 5 minute walk of the town centre where there are a full range of shops and services. The Tenant Relations Officer (TRO) has developed close relations with the local community facilitating total integration and blending with the local community. The TRO, along with a trainee TRO, are developing ideas with local organisations about future collaborations in delivering local services to the community. This collaborative relationship between TRO and community is a core aim of each Respond scheme.

Utilising the services of 'Creative Foundations' the TRO helped support 5 individual tenants to move homes. Creative Foundations recognise that moving home is a particularly stressful time so offer a support service to individuals experiencing poor mental health.

The TRO has established strong connections with several local support groups including Age Friendly Ireland. This programme is designed to assist our aging population to live in their own community as active and valued members, and to feel able to remain in their own homes for as long as possible.



Baltinglass is moving towards being the first Age Friendly Lifetime Community – this would require a partnership approach and there is a four step process that must be followed.

Respond in partnership with the Global Brain Health Institute (GBHI), are piloting the concept of a Brain Health Village in Rathcoran, Baltinglass. The pilot is based in Rathcoran for several reasons, including the beautiful environment of the scheme. One of the key aspects contributing to brain health is easy access to nature and Rathcoran is an excellent example of how housing can integrate with the natural environment. Respond have secured funding for an "Artist in Residence" to work with our tenants on an outdoor "Eco Art" project.

A planting project called 'Creative Places' (funded by Wicklow Co Council and the Arts Council) is included at this location, which involves developing a planting and biodiversity training programme with the residents for part of the extensive zoned the open space at Rathcoran'.

The project illustrates Respond's vision of adaptive reuse of existing buildings. Carbon emissions reduction was achieved by renovating the existing convent building, which lends itself to the creation of beautiful apartments, all accessed through a central core. One of the priorities of the project was the restoration of the convent building. The heating system and communal energy efficiencies allow for efficiencies in the heating system and the resultant BER rating.



10.2. Case study: Carrs Lane, Malahide Road, Dublin 17

Opperman and Associates



Carrs Lane

Malahide Road, Dublin 17

Carrs Lane based at the Malahide Road Junction in Balgriffen, County Dublin 17, is home to an ambitious development of 59 units delivered by Respond in partnership with Fingal County Council. The development comprises of a mix of one, two and three bedroom apartments and was funded by the Housing Finance Agency and the Department of Housing, Local Government and Heritage. This development complies and in many cases goes beyond the standards

contained in the 'Sustainable Urban Housing – Design Standards for New Apartments Guidelines for Planning Authorities' (2018)'

One of the priorities for this project was the retention of the historical Holm Oak Trees on the site. The site formed a part of the original Belcamp Hutchinson lands dating back to the 17th Century with connections to the Georgian Period in Dublin. The retention of these trees proved a challenge as the trees imposed a significant site constraint. It also presented an opportunity to be innovative while respecting the historical and environmental significance of the trees. The building, which comprises of two square four storey blocks with interconnecting external walkways is shaped "amidst" the trees and the walkways give the illusion of "sitting" within the trees. The external walkways are designed to allow for incidental conversation and children's play at each level. The development aims to integrate





with the trees throughout the site. Angled tall slender columns support the walkways and mimic the branches of trees. Elsewhere, cantilevered balconies appear to 'float' amidst the trees. The trees provides a high level of visual amenity and depict a positive street frontage on the northern and eastern boundaries. The western boundary of the site also has some Leyland cypress trees. Although they are of low ecological value, they provide a visual and physical screen between the development and the existing house to the west.

As an Approved Housing Body (AHB), Respond are committed to the Governments Climate Action goals and we have spent the past several years working to reduce our carbon footprint on all of our developments. All 59 units have air to water heating systems installed along with photovoltaic (PV) panels on the roof, green roof structures and heat recovery heating units combining to ensure lower energy usage in these homes ensuring an overall BER rating of A2.



Floor to ceiling windows allow natural light to flood into the homes while giving an excellent relationship to the interior and exterior space. The Daylight Report shows that the average daylight factor of the apartments is 1.02% with the highest at 6.04%. The high levels of natural light entering the home is another source of energy conservation leading to less energy consumption by tenants. The building's thermal envelope values greatly exceeded the minimum requirement of Part L of the 2011 Buildings Regulations. Air permeability levels were tested on project completion with all apartments achieving under 3m3/m2/hr.

The development is close to public bus stops with direct routes to the city and provides 144 safe bicycle spaces for tenants. There are 66 carparking spaces but the higher volume of bicycle spaces is to encourage a more viable ways of traveling across the city. In order to save space and reduce bike theft, easy-use double stacked bicycle parking is provided. In this instance, the method used of stacking is a BDS Two Tier Rack. The racks have easy lift gas struts to lower the top rack to the ground to ensure minimal amount of lifting is required to load and unload the bike. The stacked parking structures were constructed from "Green Mobilane" fence which is made from a steel grid woven with "climbing plants" to form a hedge with a green flat roof. The innovative "green" bicycle racks will give opportunity for further vegetation and biodiversity within the development. To further increase the accessibility of bicycles, bike wheeling ramps were added to stairs on the development.

This development is an exemplar scheme which illustrates Responds commitment to energy reduction in its schemes and promoting cycling as an alternative means of transport. This scheme illustrates that sustainable and energy efficient projects are cost efficient. Respond, Fingal County Council, contractors, architects and consultants committed themselves to successfully deliver tangible, yet cost-effective and environmentally friendly homes which will sustain for many years to come.

10.3. Case study: Beechpark, Stillorgan, Co. Dublin

PD Lane Associates



26

New Homes

93

Units per
hectare

Density

Beechpark

Stillorgan, Co Dublin

The historic villa, originally known as Ferney, dates from the early nineteenth century and was constructed in the Regency style, with its elegant double bow windows and conical slated roofs. After it was acquired by a religious order and converted into a school for the deaf in the mid-1950s, the land was sub-divided, leaving the existing structure on its current but modest site area of 0.28 hectares.

The brief sought to sub-divide and convert the existing villa, a Protected Structure, into residential units and to construct new residential units on the remaining but restricted site adjacent to the villa.

The primary design strategy envisaged a new courtyard garden as the central component, a new space that connects the old to the new and enhances the historic





structure by providing a new garden setting around the footprint of the former villa, recalling perhaps its original setting. The scale and massing of the new build element comprise two separate forms in direct response to the two very differing scales in the immediate context.

This includes:

(i) A low horizontal element, containing two storey duplex units (4 in total) which is placed parallel to the original historic structure, ensuring maximum sunlight to the new courtyard garden and the original protected structure and;

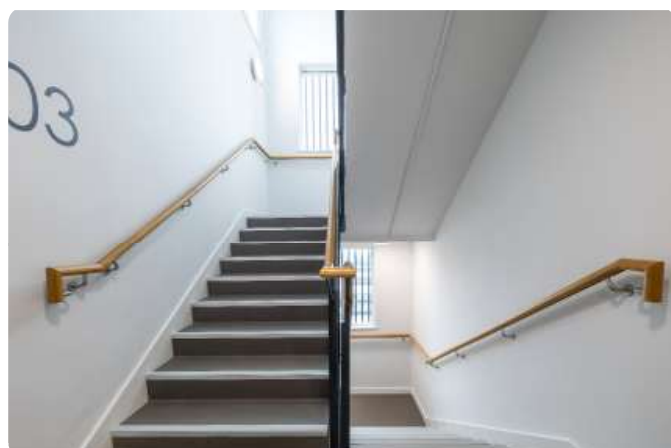
(ii) A vertical element, which contains 12 apartments and acts as a counterpoint to the horizontal element, forming an appropriately scaled edge to the street where 5-6 storey apartments are located opposite.

Both new elements are designed to be distinct and contemporary. An external wall insulation system with a fine aggregate finish is used to compliment the render finish of the historic structure.

The proposed sub-division of the existing house seeks to respect and retain the existing plan arrangement, the varying floor levels, and each of the existing window openings. Therefore, the proposed 10 new individual units are located either side of the central area and in each of the existing wings without any modification of the original load bearing walls - thus the original plan form remains fully legible in accordance with good conservation practice.

A total of 26 residential units are provided for the new development. 10 units are located in the historic structure (6 x one beds and 4 x two beds) with the new build comprising 16 units (2 x studios, 8 x one beds, 2 x two beds and 4 x three bed units).

This scheme is an exemplar project for Respond, illustrating the sensitive reuse of a protected structure and the provision of new distinct and contemporary housing accommodation.



10.4. Case study: Charlestown, North Finglas

MCORM Architects



222
New Homes

220
Density
Units per
hectare

Charlestown

North Finglas

This development is the second phase in a wider master plan vision for Charlestown Centre in North Finglas. The first phase of the development provided 10,000 sq metres of retail floor space, 285 apartments and a cinema leisure complex. The second phase completes the original vision and supports the existing Centre in providing more facilities for the area.

The Phase 2 development consists of 222 apartments, 36 one-bedroom units, 88 two-bedroom homes and 98 three-bedroom apartments to create a range of home types for a variety of households. The development is made up of 5 Residential blocks, 3 of which are managed by Respond for social housing and the remaining two blocks are in private ownership. The





development also contains retail, gym, crèche and public spaces. The second phase builds on the principles of the master plan to create a coherent, sustainable and higher density development with a mix of uses, establishing a unique identity and sense of place.

Key to the overall vision is the creation of intimate, pedestrian streets and public squares which connect the development with the previous phase as well as surrounding infrastructure. Permeability and connection is at the core of how the layout is designed with a clear hierarchy of routes that are designed for the human scale.

Elements of modern methods of construction were utilised on this scheme to ensure consistent high quality and quick delivery on site. Pre-cast façade elements, balconies and bathroom pods were constructed off site with standardisation facilitating an efficient build on site. Standardisation of apartment types and the scale of the development were two key factors that lent this scheme to employing modern methods of construction.



10.5. Case study: Green community spaces and allotments



Community
Facilities

Green spaces

Multiple Respond Schemes

Aspiring to create a multigenerational greening strategy within Respond creating green community space and allotments.

Since Respond was founded in 1982, community greening and allotment schemes have been developed by keen individuals including Tenants and tenant relation officers. Respond's vision is to "green" the public realm of all of their developments, to promote green sustainable communities and to support the wellbeing benefits associated with a proximity to nature.

Respond are now looking to build on this tradition and actively promote greening initiatives across our developments with a focus on creating natural spaces and systems which will offer intergenerational external areas for people to meet, socialise and garden. The aim is to create social external areas and places and for people and communities to thrive within our developments.

As part of this initiative Respond have made an application for funding to the Community Climate





Action Plan to pro-actively create engaging green community space and allotments which all age groups can enjoy. Respond are presently engaging on a pilot greening on some certain schemes in collaboration with a horticultural group “Siolta Chroi”, the Irish for “seeds of the heart”, who envisage a more connected world where native eco systems are restored, and biodiversity of agricultural forestry is encouraged.

Respond will also carry out educational workshops with tenant groups which explore regenerative ecosystem restorative work to connect people and communities back to the natural world. Airmount, Mountjoy Square and Abbeyleix road Laois are good examples of where allotments have brought communities together.

Respond’s vision aim is to create active green social spaces within all our developments which are productive and engaging and can encourage multigenerational participation. These spaces are key to people and communities well-being and create connection, identity and pride. The aim is to benefit the wider environment, the existing community, and to promote well-being and social interaction through gardening. Through careful planning and the addition of seated areas within landscaped gardens and open spaces, communities are encouraged outdoors to connect with nature and with other tenants, while also increasing the biodiversity of Respond developments.



10.6. Case Study: Keeper Road, Drimnagh

Paul Keogh Architects



Keeper Road

Drimnagh

Respond's Keeper Road development proposal is designed to provide a high-quality residential scheme for older persons from the immediate Drimnagh locality and the wider south city area.

Zoned Z3 – Neighbourhood Centre is occupied by a now defunct community facility. The site is at the centre of two parades of local shops, many of which

are now closed, with those to the west of the Respond site the subject of a grant of planning permission for the construction of a four and five-storey apartment development of 41 units. Lands immediately to the north have been rezoned to Z10 Sustainable Mixed Use, and it is anticipated that these will be brought forward for an apartment development in the not-too-distant future.

Respond acquired the Keeper Road plot on foot of a successful expression of interest to Dublin City Council, who are partnering with the Approved Housing Body in developing this 'brownfield' site. Following an Office of Government Procurement tender process, a design team led by Paul Keogh Architects was appointed to bring the project forward to planning, which was granted in August 2024, and to prepare detailed designs and construction documents for a projected Q2 2025 construction start.





Forming a focal point at the centre of the former shopping parade, and the corner to the rezoned lands behind, PKA's three, four and five storey design seeks to provide an architectural focal point in this otherwise low-rise locality - in line with Government and Dublin City objectives to increase residential densities, and building heights, in appropriate locations within the city.

The proposed development consists of 18 one-bedroom apartments, designed to the Department of Housing, Local Government and Heritage's apartment design standards and best practice guidelines for purpose-built housing for older persons. Three of the units are designed to the Irish Wheelchair Association Best Practice Access Guidelines housing standards.

Following the DHPLG's 2018 Building Height Guidelines' recommendation that four storeys, and higher in appropriate locations, should be the 'default' height

where two floors has previously been the norm, the Respond development consist of a four storey 'plinth' - matching the mass of the approved development adjoining - with a taller five storey element holding the site corner.

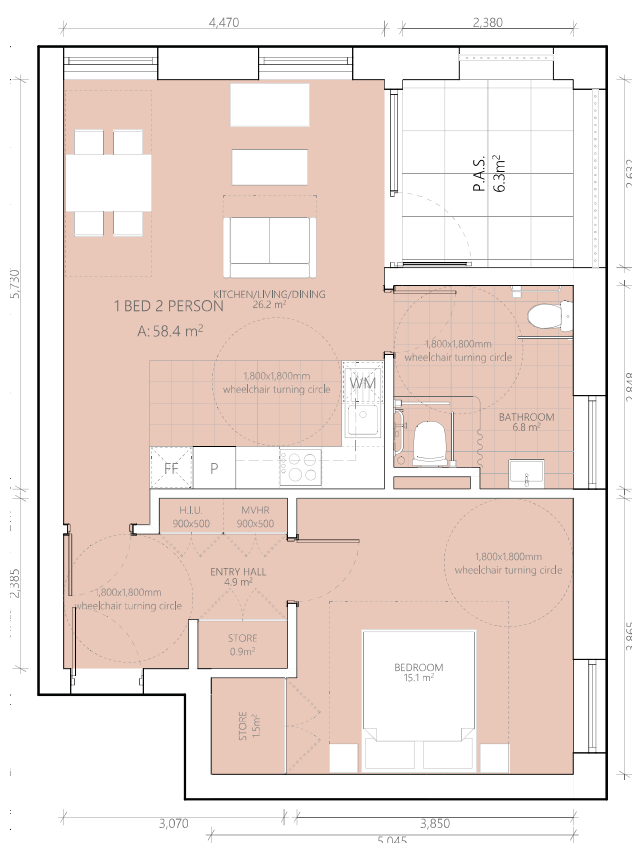
The 18 apartments - typically five per floor - are laid out off an external access deck, and in a horse-shoe arrangement that surrounds a central lightwell and lift/stair core. At ground floor level there is a community room for the use of residents and the wider community, and there is a landscaped roof terrace above the rear section of the block to provide residents with a communal amenity space. There are three parking spaces at ground floor level - contained within the footprint of the development and assessed from the laneway to rear of the site.

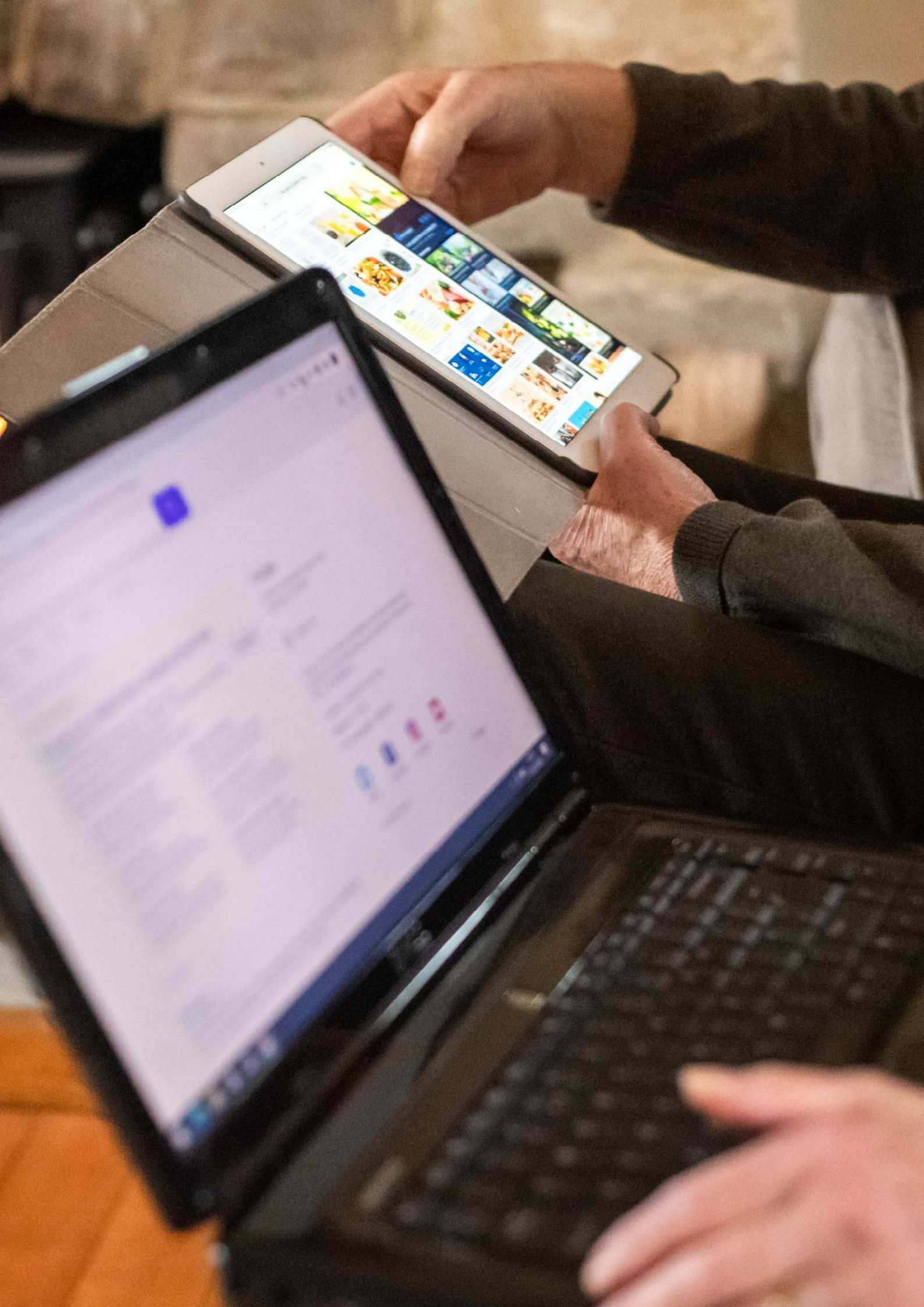
With a reinforced concrete structure, brick-faced externally, the architecture of the scheme consists of a composition of well-proportioned metal windows that are juxtaposed with larger recesses that provide each apartment with a spacious outdoor seating area as an extension of the main living room within.

The corner location of the development enables all units to have street views, and a total of 60% to have corner balconies, providing passive surveillance of the public realm and reducing opportunities for antisocial behaviour around the development. There are no apartment units at street level, and the ground floor community room is access directly from Keeper Rd, activating the street frontage further.

Aspiring to be an exemplar of environmental best practices, the proposed development will be built to comply with the now-obligatory Nearly Zero-Energy Building (NZEB) standard, as well as using construction materials and components that are sourced from responsible and local sources.

In summary, the Respond development aspires to be an exemplar of higher density infill development, providing best-in-class age-in-place housing, and enhancing the demographic profile of the Keeper Road and Drimnagh area generally.







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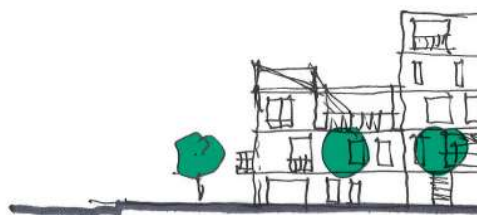
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11.1. Appendix A : Aspirational brief considerations for developments

Providing homes which allow Tenants to live independently is integral to Respond Housing Schemes.

There are many consideration that can improve environments for people with dementia that will also help all tenants.

Key design principles to be stitched into scheme briefs include:



Sustainable and ecologically sensitive design

1. Embedding flexibility and adaptability by understanding the current and future needs of the community.
2. Promote public health and a clean and safe environment.
3. Promote 'lean, green and clean' design principles.
4. Integrate biodiversity and consider how connection with nature can benefit health and well-being of building users.
5. Consider site specific impacts of climate change and possible mitigation measures.
6. Integrated Sustainable Urban Drainage using methods that boost sustainability alongside encouraging biodiversity.
7. Orientation and configuration of buildings to be considered at master plan stage, to maximise light and dual aspect and minimise over heating.
8. Energy strategies to be discussed at master plan stage and spacial requirements provided.
9. Modern methods of construction to be considered if benefits to value for money and sustainable performance achievable.
10. Consideration of whole life carbon of building and expected lifespan of elements of the built fabric.



Landscape and public realm

1. Level access for all, and clear and easily identifiable routes.
2. Landscaped areas suitable for intergenerational cohesion.
3. A clear and recognisable signage strategy incorporating street signage, building signage and internal wayfinding signage.
4. A balanced lighting scheme which provides safety, atmosphere and considers impact on biodiversity.
5. Encouraging active travel through people-focused design and ease of access to pavements and cycling routes.
6. Substantial green spaces, including allotments, to allow for social interaction and boosting mental health through considered visual amenity.
7. Parking spaces for easy conversion into planted areas should parking requirements reduce in the future.
8. Allow discussions with tenants to inform planting specifications.



Fig.246. Embedding new development to strengthen communities
Respond in conjunction with Ferreira Architects for EOI submission to DCC



Shared communal spaces

1. Distinguishable shapes, colours or patterns for communal entrances.
2. Clear/ directional lighting throughout.
3. Clear/ directional signage throughout.
4. Colour differentiation to be considered for doors and handrails.
5. Different colours of floor finishes to be used at every level.
6. Avoid strong patterns and reflective surfaces on floors.
7. Seating throughout circulation areas is encouraged.
8. Windows within circulation space for access to daylight and visual amenity which can help with orientation.
9. Varying front door colours.
10. Provide ease of access to axillary spaces (such as bins) and keep travel distances to a minimum.
11. 1800mm wide corridors are encouraged throughout, and length of corridors should be kept to a minimum.
12. Suitability of deck access considering, size of scheme, maximum of 3 homes in any one direction, no more than one 3 bed home per deck, deck width a minimum of 1.5m wide, no bedroom windows onto deck.



Within the home

1. Clear visual links from the front entrance door to external space.
2. Orientation, building height, views, privacy requirements, wind factors, daylight, noise, comfort and usability considered in amenity space design.
3. Flexible and adaptable spaces are encouraged, to accommodate future needs of tenants.
4. Floor build up to allow for level access shower to be retrofitted if required.
5. Patressing for grab-rails to be integrated within all bathroom walls, for rails to be retrofitted if required.
6. Acoustic design must be robust to ensure performance of peaceful spaces for tenants
7. Fittings to be easy and intuitive to use and hard wearing.
8. Finishes to be hard wearing and warming.
9. Smart and assistive technology to be incorporated as required for specific tenants needs.
10. Mechanical, electrical and plumbing infrastructure to be designed to allow for installation of innovative systems which allow for independent living.
11. Area to promote sustainability through recycling is essential, with 3 bins to be provided per kitchen.
12. Tenants handbook/ instruction videos to be provided to maximise energy efficiency of the homes, e.g. beneficial use of windows and blinds to regulate internal environment.

11.2. Appendix B

List of reference documents



The Respond Design Guide is designed to be referenced along side all relevant guidance and legislation.

All scheme briefs to include summary of all documents and standard which must be met.

Any further changes will be updated in an Appendix format, which will be updated along with the list below every two years or as deemed required by Respond.

The list should not be regarded as exhaustive. All users of the design guide are reminded of their responsibility to ensure compliance of all schemes are met from master plan design up to final certification by the assigned certifier.

All projects:

National and Local Policy Documents (Latest Edition)

- Refer to www.gov.ie and local council websites.

Planning and Development Bill 2023

- <https://www.gov.ie/en/publication/8bdf0-guide-to-the-planning-and-development-bill-2023/>

Sustainable and Compact Settlement Guidelines for Planning Authorities (published January 2024)

- <https://www.gov.ie/en/consultation/451fc-public-consultation-on-the-draft-sustainable-and-compact-settlement-guidelines-for-planning-authorities/>

National Planning Framework - Ireland 2040 Our Plan (NPF) Currently under review.

- <https://www.gov.ie/en/publication/daa56-national-planning-framework-ireland-2040-our-plan-npf-2018/>

Technical Guidance Documents (Latest Edition)

- <https://www.gov.ie/en/collection/d9729-technical-guidance-documents/>

Design Manual for Urban Roads and Streets (DMURS) (Latest Edition)

- <https://www.gov.ie/en/publication/3360b1-design-manual-for-urban-roads-and-streets/>

Urban Development and Building Height Guidelines (UD) (BHG) (Latest Edition)

- <https://www.gov.ie/en/publication/93d22-urban-development-and-building-height-guidelines-ud-bhg-2018/>

Site Layout Planning for Daylight and Sunlight: A guide to good practice (BR 209)

- <https://www.brebookshop.com/details.jsp?id=326792>

Safety, Health & Welfare at Work Act and Construction Regulations 2013-2021

- www.hsa.ie/eng/legislation



Sustainability

The RIAI 2030 Climate Challenge. An Architects Guide (October 2023 Edition)

- <https://www.riai.ie/discover-architecture/riai-publications/riai-2030-climate-challenge-an-architects-guide>

RIBA Climate Tool kit

- <https://www.architecture.com/-/media/files/Climate-action/RIBA-2030-Climate-Challenge.pdf>

Architects Declare Practice Guide

- AD-Practice-Guide-2021-v1_3.pdf (architectsdeclare.com)

Dark Skies Ireland Tool kit

- Tool kits-and-Guidelines.pdf (darksky.ie)

UN Sustainable Development Goals

- THE 17 GOALS | Sustainable Development (un.org)

Residential

Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) (Latest Edition)

- <https://www.gov.ie/en/publication/a9965-sustainable-residential-developments-in-urban-areas-guidelines-for-planning-authorities/>

Quality Housing for Sustainable Communities (Latest Edition)

- <https://www.gov.ie/en/publication/60868-quality-housing-for-sustainable-communities/>

Employers Requirements for Detail Design of Quality Housing (Revision 1 September 2020)

- <https://www.gov.ie/en/publication/2f78e-employers-requirements-for-detail-design-of-quality-housing/>

Design Manual for Quality Housing (Latest Edition)

- <https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/>

Sustainable Residential Developments in Urban Areas (SRDUA) (Latest Edition)

- <https://www.gov.ie/en/publication/a9965-sustainable-residential-developments-in-urban-areas-guidelines-for-planning-authorities/>

Design Standards for New Apartments (DSFNA) (Latest Edition)

- https://www.housing.old.gov.ie/sites/default/files/publications/files/december_2020_-_design_standards_for_new_apartments.pdf

Altered Estates 2: How to address changing priorities in estate regeneration

- <https://www.levittbernstein.co.uk/research-writing/altered-estates-2/>

Accessibility

Irish Wheelchair Association's 'Best Practice Access Guidelines: Designing Accessible Environments' (Latest Edition)

- <https://www.iwa.ie/access-guidelines/best-practice-access-guidelines-4/>

Universal Design Guidelines for Homes in Ireland (Latest Edition)

- <https://universaldesign.ie/built-environment/housing/>

Housing for Travellers

Residential Caravan Parks for Travellers (Latest Edition)

- <https://www.gov.ie/en/publication/f86ae-residential-caravan-parks-for-travellers/>

Accommodating Transient Traveller Families (Latest Edition)

- <https://www.gov.ie/en/publication/423ec-accommodating-transient-traveller-families/>

Group Housing for Travellers (Latest Edition)

- <https://www.gov.ie/en/publication/d36af-group-housing-for-travellers/>

Older Peoples housing & Care Settings

Dementia Friendly Dwellings for People with Dementia, their Families and Carers (Latest Edition)

- <https://universaldesign.ie/built-environment/housing/dementia-friendly-dwellings/>

Improving Quality of Life and Enhancing COVID-19 Infection Control in Existing Residential Care Settings for Older People (Latest Edition)

- <https://universaldesign.ie/built-environment/residential-long-term-care-settings-for-older-people-/>

Dementia Enabling Environment Principles (The Dementia Enabling Environment Virtual Information Centre, Western Australia.)

- <https://www.enablingenvironments.com.au/dementia-enabling-environment-principles.html>

Living with Dementia. A guide for the conditioning of housing, with a focus on inclusion and participation, University of Chile (Spanish Edition)



- https://www.viviendocondemencia.cl/wp-content/uploads/2021/11/guia_viviendo_con_demencia_octubre_3-1.pdf

Toolbox for living with Dementia. University of Chile (Spanish Edition)

- <https://libros.uchile.cl/files/presses/1/monographs/1201/submission/proof/index.html>

Additional reference material

Homes for Smart Ageing Universal Design Challenge (Latest Edition)

- <https://universaldesign.ie/Awards/Homes-for-Smart-Ageing-Universal-Design-Challenge/>

Early Learning settings

Universal design guidelines for early learning and care settings (Latest Edition) (and all key legislation and policy set out therein.)

- <https://aim.gov.ie/app/uploads/2021/05/universal-design-guidelines-for-elc-settings-introduction-1.pdf>

Universal Design Self-Audit Tool for Early Learning and Care Settings (Latest Edition)

- <https://aim.gov.ie/app/uploads/2021/08/Universal-Design-Guidelines-for-ELC-Settings-%E2%80%93-Self-Audit-Tool-for-ELC-Settings-PDF.pdf>

Early Years Quality and Regulatory Framework (Latest Edition)

- <https://www.tusla.ie/services/preschool-services/early-years-quality-and-regulatory-framework/>

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