

# Permeability Guidelines

Reconnecting our Communities



### **Acknowledgements**

This document was prepared by Kildare County Council's County Development Plan Implementation Team.

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**Building and Development Control** 

**Development Management** 

**Roads Projects** 

**Sustainable Transport** 



## Reimagining Permeability in Kildare – Reconnecting our Communities:

### **Permeability Guidelines:**

Technical guidance for use in Development Management and Permeability Improvement Project processes





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Kildare County Council through our County
Development Plan, Local Area Plans and AreasBased Transport Assessments are committed to
delivering the 10-Minute Neighbourhood concept
to ensure, insofar as it is practical and possible,
that facilities and services are "on the doorstep"
to improve people's quality of life and improve the
social network within the neighbourhoods in which
they live, work and recreate.





#### Why this guide is needed

For many years, even decades, communities in County Kildare have been developed in suburban formats, primarily designed around the private car. The impacts of creating such places are now well understood and the move towards crafting places that are designed around people, leads to the creation of more attractive towns, villages and neighbourhoods with a wide range of positive outcomes, including improved quality of life, more walking and cycling, better health, better social interaction, and improved climate impacts.

Kildare County Council has a responsibility under the planning and climate legislation to ensure that the places we develop are both compact and well connected.

Kildare County Council through our County Development Plan, Local Area Plans and Areas-Based Transport Assessments are committed to delivering the 10-Minute Neighbourhood concept to ensure, insofar as it is practical and possible, that facilities and services are "on the doorstep" to improve people's quality of life and improve the social network within the neighbourhoods in which they live, work and recreate. Well-connected communities improve the level of short trips through providing safe and secure links for walking and cycling whilst also providing health and climate change benefits.

#### What the guide provides

This guide seeks to ensure that new development is designed to be integrated with existing communities and provides for connections to future development and that existing neighbourhoods benefit from improved integration through the provision of new retrofit permeability linkages.

This technical guidance provides the tools to enable Kildare County Council and developers active in County Kildare to achieve connected communities for existing and future residents. The guide provides a step-by-step toolkit for the quantitative and qualitative assessment of development proposals and provides tools to assist the planning process in ensuring that connections are deliverable and of the highest quality.



To ensure Kildare's towns, villages and neighbourhoods provide a comprehensive range of easily accessible services that can enhance the quality of life for its residents and facilitate safer and shorter journeys by foot and bicycle. Referred to as the '10-Minute Neighbourhood' approach, the focus is on promoting healthy placemaking and creating high quality connections through public spaces.

The 10 - minute neighborhood concept seeks to have all community facilities and services accessible within a short walk or cycle from homes or are accessible by public transport services connecting people to larger scaled settlements or higher order services and facilities.

Permeability or Connectivity within our urban areas permits and encourages the free movement of pedestrians and cyclists, a more permeable layout will offer greater choice of direct routes enhancing higher footfall and security along these routes.

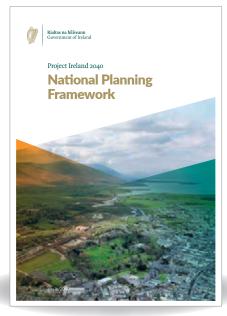




Kildare County Council has a responsibility under planning and climate legislation to ensure;

The delivery of connected neighbourhoods is proven critical to enabling active travel. The establishment of a safe, attractive, universally accessible and more permeable environment offers pedestrians and cyclists greater choice of direct routes to their destinations, creating higher levels of activity.

National, Regional and Local Policy frameworks provide emphatic support for improving the permeability of our urban settlements, which in turn supports a wide array of national policy objectives that society as a whole values;







## Benefits of connected places and neighbourhoods

#### **Active Travel**



Active travel involves travelling with a purpose using your own energy by means of walking, wheeling and or cycling. The delivery of connected neighbourhoods is critical to enabling active travel where the safe, attractive and universally accessible areas can offer pedestrians and cyclists a greater choice of direct routes to their destination which will generate increased activity.

#### **Urban Design & Placemaking**



National and Regional policy reinforces the need for 'healthy placemaking', highlighting the connection between people and place and how people importantly interact with and use the everyday places of the built environment that surrounds them. Our public spaces need to be highly accessible and connected, safe and comfortable whilst also creating opportunities to be physically active reducing the need for the car-based journeys.

#### **Healthy Lifestyles**



According to the World Health Organization, "forms of transport that entail physical activity such as cycling and walking, separately or in conjunction with public transport, offer significant positive physical and mental health gains". Urban and suburban development which can 'design out' these modes should be discouraged promoting healthier more sustainable options.

#### **Tackling Climate Change**



Tackling the climate and air pollution crises requires a modal shift in the use of more sustainable modes of transport. Reducing our car journeys and riding a bike can contribute significantly in the reduction of greenhouse gas emissions which in turn can make our public spaces cleaner and healthier to use.

#### Safe routes to School



Connecting our neighbourhoods with safer more accessible routes can encourage our children to walk and cycle to school making a big impact on their safety and wellbeing. Congestion during school times is often a major issue but the promotion of active travel can create safer access options.



Creating connected places and neighbourhoods will promote the use of walking, cycling and more sustainable modes of transport for short trips, discouraging the need for car-based journeys to a mix of services (e.g. shops, creches, schools and bus routes), green spaces and amenities that are easily accessible **on the doorstep.** 

The following infograph illustrates the facilities and services within 800m (a 10-minute walk) of a central point (as the crow flies). The less integrated a place is then the walktime to serivces will increase, reducing the attractiveness of walking and cycling.

#### **Neighbourhood Example - Court House Square, Maynooth (800m)**





### 1. Connecting new development to existing neighborhoods

The design and layout of new developments offers opportunities to establish best practice standards in placemaking and urban design ensuring connectivity to existing neighborhoods will further enhance links to facilities, services, open space and sustainable mobility measures which will feature from the outset.

## 2. Ensuring new developments connect to future developments

All new housing developments will be required to ensure site layout proposals detail possible future connections to pedestrian/cycle links ensuring any future schemes or phases can continue to join in facilitating the '10 minute settlement concept'.



Figure 2: Staff-enhanced plan. Red buildings – commercial only, pink buildings – mixed use, orange buildings – mithfamly, Store building – cyric use. Thick yellow lines shoel proposed and future street connections, narrow yellow lines how promoved and future and restrictions.



Stonehaven, Naas. (Site ready for future phases and connections)

#### 3. Providing new linkages on existing desire lines

Formalizing existing desire lines that normally develop in and through housing estates can reduce walking distance and enhance accessibility to areas of recreational amenity. In some cases this may involve the retrofitting of existing links allowing more formal universal access.





Rinawade Park, Leixlip & Meadowbrook Close, Maynooth

#### 4. Retrofitting connections where they don't exist

Permeability measures identified in Local Area Plans and in the preparation of settlement specific Area Based Transport Assessments (ABTA's) will undergo assessments to evaluate their usefulness, walk and cycle time improvements as well as the security of those that will use the potential link. Where a benefits assessment doesn't highlight any real benefits but represents a crucial link to other independent permeability connections, these will be assessed on a sub area basis and impact they will provide.





Elsmore Close, Naas & Loughbollard, Clane

#### 5. Take back road space -

Reducing road space and designing our streets primarily in the interests of pedestrians and cyclists will enhance the accessibility of our neighborhoods giving priority to pedestrians over cars. Whilst vehicles may be allowed to use with caution, it allows for stronger cycle/pedestrian infrastructure to be developed, along with stronger placemaking opportunities along these routes.





Fairgreen Square – new cycle measures in place, including larger footpaths that facilitate public benches and outdoor seating.

# 1 INTRODUCTION

#### 1.1 Vision:

To ensure that Kildare County Council's (KCC's) towns, villages and neighbourhoods provide a comprehensive range of conveniently accessible services to enhance the quality of life for its residents and facilitate safe and convenient short journeys on foot and by bicycle to access these services, the focus is on promoting healthy placemaking and creating high-quality public spaces. This approach is referred to as the "10-Minute Neighbourhood" approach.

Permeability describes the degree to which people have a choice of routes through the urban environment, providing proximity and access to services by short trips.

While the 10-Minute Neighbourhood concept can be applied to towns and villages of all sizes, the results may not be as effective in smaller towns and villages due to their lack of critical mass to support local services and employment centres. However, all settlements both large and small will benefit from greater levels of permeability and improved walking and cycling facilities.

How we aim to achieve this:

- → We will seek to ensure that best practice in urbanism informs everything we do, supported by a range of national planning policy and concentrated investment in prioritised infrastructure;
- → We will seek to ensure that all new development supports the concept of the 10-minute neighbourhood and improves quality of life for the residents of our towns, villages and neighbourhoods; and
- → We will seek to improve levels of access to services by retrofitting new connections in the urban environment and by providing new facilities to meet the needs of communities.

New connections will be provided through the delivery of Permeability Improvement Projects to improve access to services and to enable short trips by walking / cycling to those services. The Permeability Guidelines (below) explain how we will seek to ensure that Permeability Improvement Projects meet the needs of the citizens of County Kildare.

A 10-minute neighbourhood can be described as a neighbourhood where a range of community facilities and services are accessible within short walking and cycling timeframes from homes or are accessible by high-quality public transport to these services in larger settlements.

#### 1.2 Delivery of Permeability Improvement Projects

Kildare County Council sees the delivery of Permeability Improvement Projects as a key priority given the multi-faceted benefits of integrated neighbourhoods.

Permeability improvements in County Kildare will be delivered as part of new developments or by retrofitting permeability, as follows.



1. Delivery of permeable new developments by developers. KCC will ensure the delivery of permeable new developments through the Development Management process.



#### 2. Retrofitting permeability projects delivered by KCC.

These improvements include small projects as well as larger projects benefitting from capital funding, such as the NTA Active Travel capital funding. The NTA Active Travel Investment Grants 2023 allocation for Kildare County Council included 32 Active Travel projects.

#### 1.3 Purpose of this document

This document, the Permeability Guidelines, have been prepared in accordance with Action TM A13 in Chapter 5 of the Kildare County Development Plan 2023-2029.

Action TM A13; Prepare 'Guidelines for Permeability Connections' in County Kildare to include a flagship permeability project in Kildare.

#### 1.4 The policy context

The adopted national policy framework provides emphatic support for improving the permeability of the urban environment, which in turn supports a wide array of other national policy objectives that society as a whole values and is mandated to achieve, including the following:

- → 10-Minute Neighbourhood / 15-Minute City;
- → Urban design and placemaking;
- Active travel;
- → Tackling climate change;
- → Healthy lifestyles;
- → Safe routes to school; and
- → [much more].

The **10-minute neighbourhood** concept has emerged in recent years, as a variant of the *15-Minute City*, and has gained traction globally as a result of the Covid-19 pandemic. The *10-minute neighbourhood* concept seeks to have all community facilities and services accessible within a short walk or cycle from homes or are accessible by public transport services connecting people to larger scaled settlements or higher order services and facilities.



- → The delivery of connected neighbourhoods is proven critical to enabling active travel. The establishment of a safe, attractive, universally accessible, and more permeable environment offers pedestrians and cyclists greater choice of direct routes to their destinations, thereby generating higher levels of pedestrian and cyclist activity.
- → Likewise, tackling the climate and air pollution crises requires a modal shift to the use of more sustainable modes of transport.
- → National and regional policy reinforces the need for 'healthy placemaking'. Healthy placemaking highlights the connection between people and place and importantly, how people interact with and use the everyday places of the built environment that surrounds them. A key element of healthy placemaking is the need to create opportunities to be physically active and to reduce the necessity for car-based commuting.
- → Ensuring good urban permeability is central to the following policy documents and guidelines:
  - The National Planning Framework 2018
  - The Design Manual for Urban Roads and Streets 2013;
  - The Climate Action Plan 2023;
  - The Eastern and Midland Regional Assembly, Regional Spatial and Economic Strategy 2019-2031;
  - The Greater Dublin Area Transport Strategy 2022-2042; and
  - The Kildare County Development Plan 2023-2029.

#### **National Planning Framework 2018 (NPF)**

The NPF is a long-term framework that sets out how Ireland can move away from the 'business as usual' development pattern. The NPF recognises that the provision of a well-functioning integrated public transport system, enhances competitiveness, sustains economic progress and enables sustainable mobility choices for citizens.

The NPF policies are structured under National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs). The relevant NSOs includes: NSO 1: Compact Growth; NSO 2 Enhanced Regional Accessibility; NSO 4: Sustainable Mobility; NSO 7: Enhanced Amenities and Heritage; NSO 10: Access to Quality Childcare, Education and Health Services; and NSO 8: Transition to Low Carbon and Climate Resilient Society. It also includes a number of specific NPO around sustainable mobility, such as integrating land use and spatial planning to support public transport and transport-orientated development, promoting walking and cycling as more favourable modes of transport to the private car, and prioritising walking and cycling accessibility to both existing and proposed developments.

#### **The Climate Action Plan 2023**

The Government views Climate Action as the most pressing long-term global challenge of our time. Through strengthened climate legislation, "Our Shared Future", and annually updated Climate Action Plans, Ireland has set the ambition of halving Ireland's greenhouse gas emissions by 2030 and of putting Ireland on course to becoming carbon neutral by 2050. The Climate Action Plan (2023) includes the following targets around sustainable mobility for 2030.



### Eastern and Midland Regional Assembly, Regional Spatial and Economic Strategy 2019-2031

The RSES provides the basis for the *integration of land use and transport planning*, informing the preparation and implementation of plans, programmes and projects at all levels. To achieve this the RSES sets out the following Guiding Principles for statutory land use plans:

- → The management of space in town and village centres should deliver a high level of priority and permeability for walking, cycling and public transport modes to create accessible, attractive, vibrant and safe, places to work, live, shop and engage in community life.
- → Planning at the local level should prioritise walking, cycling and public transport by maximising the number of people living within walking and cycling distance of their neighbourhood or district centres, public transport services, and other services at the local level such as schools.
- → Support the '10 minute' settlement concept.
- → New development areas, including peripheral areas, should be permeable for walking and cycling and the retrospective implementation of walking and cycling facilities should be undertaken in existing neighbourhoods, in order to a give competitive advantage to these modes. Where possible, developments shall provide for filtered permeability.

#### The Greater Dublin Area Transport Strategy 2022-2042

To encourage the use of sustainable modes of transport the Transport Strategy sets out a hierarchy of users that must be considered during the design of networks. The hierarchy considers pedestrians, cyclists, public transport, taxis & shared transport and private motor vehicles in this order.

The strategy emphasizes the concept of 'Filtered Permeability' to promote sustainable transportation. This concept aims to prioritize walking and cycling by allowing pedestrians and cyclists to travel freely through areas while restricting motorized traffic. This approach enhances safety and attractiveness for non-motorized modes of transport, especially for short trips to local services.

#### 2.1 What is Urban Permeability

Permeability or connectivity describes the extent to which urban areas permit and encourage the free movement of pedestrians and cyclists. A more permeable layout offers greater choice of direct routes thereby enabling higher levels of active travel which in turn enhances footfall and security along these routes.

The disadvantage of urban layouts based entirely on cul-de sacs, physical boundaries and loops is that routes are indirect and longer which reduces the quality of life for citizens, and essential local services and facilities are not available within a 10-minute walk from home ("on the doorstep"). This has a number of impacts, including:

- → The potential for social interaction and creating stronger communities is reduced;
- → The increased distance to local services and facilities results in the greater likelihood that people will use the car to complete short trips, rather than walking and cycling;
- There are material impacts on health and wellbeing;
- → Climate change is adversely affected; and
- → The sustainability of communities overall is reduced.

An example of such a layout is Alexandra Manor housing estate (highlighted in blue) in Clane. Figure 2 below shows a number of cul-de sacs which prohibits through movement, estate boundary walls and long winding roads which prevents movement along natural desire lines. Figure 3 shows a diagrammatic depiction of the transport network Vauban, Freiburg, Germany. The grid format layout is fully accessible for walking and cycling along all routes and provides links dedicated to active travel to maximise permeability. The layout encourages walking and cycling over the use of private cars, which is restricted to collector roads and local streets.

Figure 2: Example of an Impermeable Housing Estate in Clane, County Kildare



Source: Google Maps

Figure 3: Permeable layout



Source: NTA. Permeability Best Practice

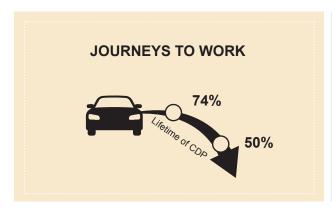
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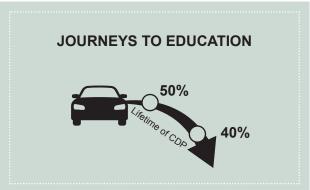
# 3 STRATEGIC APPROACH

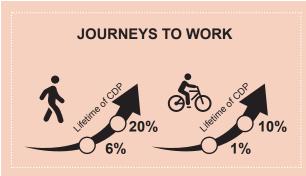
The Kildare County Development Plan 2023-2029 (CDP) is the most important public policy document shaped and adopted by the Elected Members on behalf of the public.

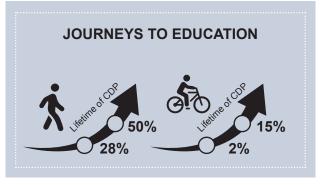
The CDP sets out very ambitious modal shift targets for County Kildare (see Figure 7 below) to shift towards more sustainable modes of transport.

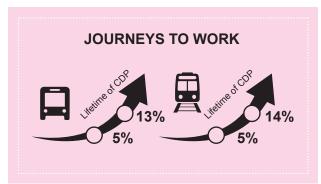
Figure 4: Kildare County Development Plan 2023-2029 Modal Shift Targets

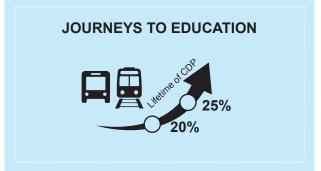












The delivery of a 10-minute neighbourhood model across settlements in County Kildare to improve access to local services on the doorstep will form a key component of that shift. This will require neighbourhoods to be integrated and improvements to permeability on a significant scale will need to be delivered to encourage the shift to active travel (walking and cycling) use.

It is therefore a priority of the Council to:

- ensure the development of permeable new developments through the development management process,
- → to identify evidence-based permeability measures in Area Based Transport Assessments (ABTAs) prepared to inform Local Area Plans, and
- → to retrofit good quality permeability links at the locations identified in ABTAs.

Examples are provided in Appendix A which illustrates the great potential of improved neighbourhood connectivity in County Kildare by implementing simple interventions such as:

- → Inserting universally accessible access/egress points within physical barriers such as walls or palisade fence;
- → Formalising existing desire lines; and
- Upgrading existing routes.

#### 3.1 Development Management

The Kildare County Development Plan 2023-2029 (KCDP) sets out a series of clear objectives to ensure all new developments are fully permeable for walking and cycling as outlined in Table 1 below. In addition to these objectives, all the recently adopted County Kildare Local Area Plans inlcude objectives to support and promote the use of sustainable active transport modes and to ensure new developments are permeable for walking and cycling.

Good design is a key element of schemes to ensure permeability links are suitable for all potential users, promotes safety and security and have a positive impact on the public realm. The efficiency and quality of designs for permeability will dictate their effectiveness and can also influence their 'usability'.

Table 1: KCDP permeability related policy and objectives

CS 013	Require that the design of future development complies with the 10- minute settlement principle through the creation of a safe, attractive, permeable, and universally accessible environment for all, including permeability to existing estates to require public consultation which maximises the potential for active modes of travel along with accessibility to both present and planned public transport options and to advocate for increased public transport options to meet this goal where none are in place.
TM O20	Ensure new development areas are fully permeable for walking and cycling at a minimum, public transport (where appropriate) and provide for filtered permeability for private vehicle access in accordance with the NTA Permeability Best Practice Guide in order to give a competitive advantage to active travel modes for local trip making.
TM O21	Ensure site layout proposals detail present and possible future connections to pedestrian/cycle links and improve permeability between existing and proposed developments including adjacent developments thereby facilitating the '10-minute settlement' concept.
TM O42	Seek to address urban congestion with particular emphasis on facilitating the development of local bus services for the Key Towns along with associated identified economic clusters within the county ensuring connectivity to and from residential areas, key employers, and public transport hubs such as train stations, along with retail and amenity sites.

#### 3.2 Local Area Plans

The Accessibility and Movement objectives of Local Area Plans (LAPs) are based on Area Based Transport Assessments (ABTAs)<sup>2</sup>. ABTAs aims to secure long-lasting transport improvements to ensure growing use of sustainable travel modes for work, education, business and visitor trips. In respect to sustainable mobility, ABTAs includes permeability measures which are based on comprehensive, evidence-based assessments and public inputs for inclusion in Local Area Plans.

Permeability measures can be divided into three main categories:

- → Removing sections of physical barriers such as walls or palisade fence;
- → Formalising existing desire lines; and
- → Upgrading existing permeability links/routes.

These measures are identified by identifying barriers which lengthen walking distances to key trip attractors such as education (schools), work (town centre), retail (supermarkets, local shops), and public transport (bus stops and train stations). Focus is placed on facilitating direct routes along "desire lines" between homes and key destinations and ensuring universal accessibility.

A transparent approach is taken to identify permeability measures for Local Area Plan settlements by inviting stakeholders to make submissions/observations at various stages of the plan making process as set out in Table 2 below.

Table 2: Stages of Stakeholder Engagement

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Stages of S	Stages of Stakeholder Engagement		
Stage 1 ABTA	<ul> <li>Information gathering to inform the ABTA</li> <li>→ Stakeholders: Primary stakeholders, elected members and general public.</li> <li>→ Briefing of the elected members (municipal district).</li> <li>→ Non-statutory stage.</li> </ul>		
Stage 1 LAP	<ul> <li>Pre-draft Issues Paper Consultation</li> <li>→ Stakeholders: Primary stakeholders, elected members and general public.</li> <li>→ Issues paper on public display.</li> <li>→ Non-statutory consultation.</li> </ul>		
Stage 2 ABTA	<ul> <li>Consultation on Draft Strategy</li> <li>→ Stakeholders: Primary stakeholders, elected members and general public.</li> <li>→ Briefing for the municipal district members on ABTA proposals.</li> <li>→ Non-statutory consultation.</li> </ul>		
Stage 3 ABTA	<ul> <li>Presentation of Transport Measures</li> <li>→ Stakeholders: Elected members (Municipal District Councillors).</li> <li>→ Briefing of the elected members on the final list of transport measures included in the ABTA.</li> <li>→ Non-statutory consultation.</li> </ul>		

<sup>2.</sup> ABTA's are structured to be in line with the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) Guidance Documents *The ABTA How to Guide, Pilot Methodology (2021) and The ABTA Advice Note (2018).* 

#### **Stages of Stakeholder Engagement**

#### Stage 2 LAP

#### **Draft LAP**

- → **Stakeholders:** Primary stakeholders, elected members and general public.
- → Draft Plan on public display.
- → Statutory consultation.

#### Stage 3 LAP

#### **Proposed Material Alteration**

- → **Stakeholders:** Primary stakeholders, elected members and general public.
- → Proposed Material Alterations on public display.
- → Statutory consultation.

**NOTE:** Submissions and observations can only relate to the Proposed Material Alterations of the subject LAP.

The delivery of the permeability measures outlined in the Local Area Plans of County Kildare is a key priority for the Council in order to deliver 10-Minute Neighbourhoods, to enable accessibility, to incentivise sustainable mobility and to give non-motorised modes a competitive advantage over trips by the private car.

#### 3.2.1 The making of a Local Area Plan (LAP)

The making of a Local Area Plan is a reserved function of the Elected Members of Kildare County Council (KCC). The members can adopt, amend, or revoke the Plan following consideration of any issues raised during the LAP process. LAPs should be made to serve the common good by adherence to the statutory requirements set out in Appendix B of this guidelines.



In accordance with Section 20(3)(r) of the Planning & Development Act 2000 (as amended), the elected members during the LAP process are advised as follows.

The statutory obligations of the Elected Members include the requirement to perform their function in a manner consistent with Section 15(1) of the Climate Action and Low Carbon Development Act, 2015 (as amended):

- **a.** the most recent approved climate action plan,
- **b.** the most recent approved national long-term climate action strategy,
- **c.** the most recent approved national adaptation framework and approved sectoral adaptation plans,
- d. the furtherance of the national climate objective, and
- **e.** the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

In addition to the statutory obligations set out above, when making Local Area Plans the members should have regard to the policy documents outlined in section 1.4 of this document which are all in support of the delivery of more connected communities and a modal shift towards more sustainable modes of transport.

A Local Authority Climate Action Charter was also signed by the Chief Executive and the Cathaoirleach on behalf of Kildare County Council (KCC) in 2019.

The Charter commits KCC to several actions to ensure KCC play a key leadership role locally and nationally in delivering effective climate action and to ensure KCC embeds decarbonisation, sustainable development and climate resilience into every aspect of the work we do.



# HOW WILL KCC ENSURE HIGH QUALITY INTEGRATION AND PERMEABILITY?

#### **4.1 New Developments**

The design and layout of new developments offers opportunities to establish best practice standards in placemaking and urban design through the integration of connectivity, facilities, services, open space, and sustainable mobility features from the outset.

The quality and sustainability of a neighbourhood can be measured by both how well it's connected to important amenities, and how pleasant, convenient, and safe those permeability links are to use.

Case Study of a new development

Appendix C includes a case study of a permeability link delivered between an existing development and a new development in Kill, County Kildare.

KCC will take the steps outlined in Table 3 below to ensure the delivery of permeability links as part of new developments and to ensure transparency during the process of delivering those connections.

Table 3: KCC steps to ensure connected neighbourhoods

Step 1	All applicants of proposed new development applications submitted on/after the adoption of these guidelines by KCC will be required to:
1.a	Ensure site layout proposals detail present and possible future connections to pedestrian/cycle links and improve permeability between existing and proposed developments including adjacent developments thereby facilitating the '10-minute settlement' concept. (Objective TM O21 of the Kildare CDP 2023-2029)
1.b	KCC recommends that all applicants engage in non-statutory consultation at preplanning stage with all stakeholders who may be affected by the development of a new permeability link. Planning applications must be accompanied by a statement outlining the details of the conducted consultation. This consultation is required only for those links that have not previously undergone consultation as part of the Local Area Plan (LAP) process.  → A detailed list of acceptable consultation methods is outlined in Section 4.1.2.
1.c	Clearly outline the benefits of each proposed permeability link, which are not included in a Local Area Plan, by including a Benefits Assessment of the link within the planning application. The responsibility for conducting Benefit Assessments lies with the applicant.  → Benefit Assessment Template provided in Appendix D.

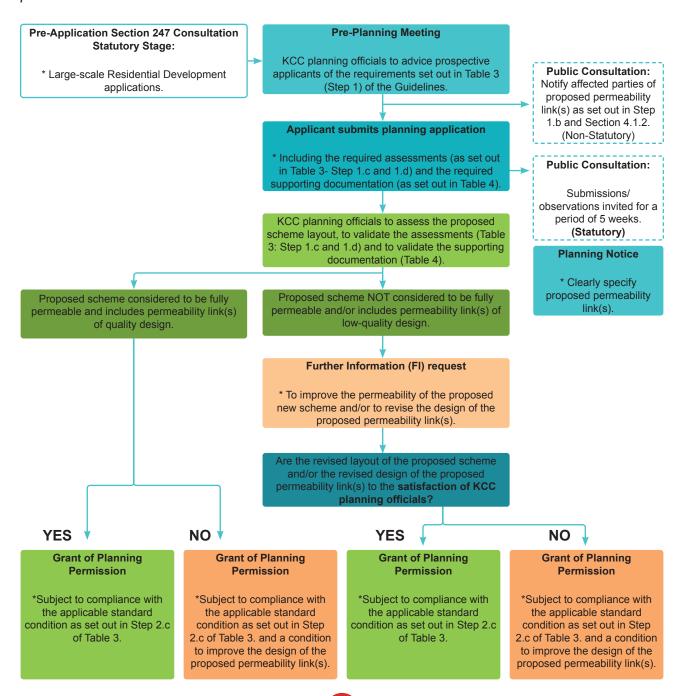
1.d Ensure the proposed permeability link(s) are of high-quality design by including a Design Assessment of each proposed link in planning applications. It is the responsibility of the applicant to complete the design assessment. Design Assessment Template provided in Appendix E. 1.e Include the full details of the proposed permeability link(s) in the public notices (newspaper and site notices) to ensure transparency from the onset. → Example of a public notice provided in Appendix F. 1.f Clearly indicate the deliverability of proposed permeability link(s) with regards to ownership. When the suggested permeability link(s) traverse portions of land not owned by the applicant, the planning application must be accompanied by a legal declaration of ownership consent to ensure the successful implementation of the entire proposed permeability link(s), if feasible. → More details with regards to the relevant agreements that needs to be in place are provided in Section 4.1.1. Step 2 The following approach (as outlined in Figure 10 below) will be followed by the planning officials of KCC to ensure the delivery of connected neighbourhoods: 2.a Planning officials to advise prospective applicants of the requirements set out in section 1.a to 1.f above during pre-planning meetings. 2.b Planning officials to validate the benefit and design assessments submitted by applicants as part of their planning applications. In most cases, the delivery of a permeability link as part of a new development will include multiple benefits, however, should the planning officials determine that there is very limited benefit to constructing a link the planning officials may request the omission of a proposed link. 2.c Planning permission will be subject to a KCC standard planning condition to ensure the implementation of the proposed permeability link(s). The applicable KCC standard planning condition (set out in Appendix G) will be determined on a case-by-case basis for: Proposed permeability link(s) to future development lands or a proposed adjoining scheme. Proposed permeability link(s) to an existing development where consent was refused by the owner to develop the proposed link. → Proposed permeability link(s) to an existing development taken-in-charge and vested by KCC or where consent was given by a private owner to develop the proposed link. → Proposed permeability link(s) to an existing development taken-in-charge and vested by KCC or where consent was given by a private owner to develop the proposed link. The design of the proposed permeability link(s) has not been agreed/ consented as part of the planning permission.

# Step 3 Non-compliance will be captured as follows: 3.a Complaints of non-compliance can be captured by submitting a 'Unauthorised Development Complaint Form' to the Enforcement section of Kildare County Council. Complaints can be made by: → The general public; → Elected members; or

Figure 5 below sets out the approach (as described in STEP 2 of Table 3 above) that will be followed by the planning officials of KCC to ensure the delivery of connected neighbourhoods:

Figure 5: Ensuring the delivery of connected neighbourhoods through the planning application process

Planning Officials of Kildare County Council.



#### **4.1.1 Ownership Agreements**

As outlined in Step 1.f of Table 3 above, where proposed permeability links involve portions of land not owned by the applicant the planning application needs to be accompanied by the necessary agreements required for the successful delivery of the proposed permeability link(s) (as a whole), where possible.

Table 4 below outlines the supporting documentation and actions required from prospective applicants when submitting a planning application to the planning department of KCC which includes proposed permeability links.

Table 4: Supporting documentation

rable 4. Supporting documentation		
Ownership / Circumstance related to the relevant existing development	Supporting documentation to accompany the planning application.	
Taken-in-Charge by KCC (not vested <sup>3</sup> ).	Applicant to submit a request to the Building and Development Control section of KCC to prioritise the vesting of the relevant existing development.  → Copy of request to the Building and Development Control section of KCC to accompany the planning application.	
Taken-in-Charge by Kildare County Council and vested.	Applicants to provide proof that the relevant existing development is taken-in-charge by KCC and vested. Once vested no further agreements are required from KCC to progress the delivery of proposed permeability link(s) other that planning permission for the proposed new development as a whole.  → Copy of proof that the existing development is taken-in-charge and vested to accompany the planning application.	
Private Ownership	<ul> <li>Applicant to establish an agreement with the owner of the relevant existing development to deliver the proposed permeability link(s).</li> <li>→ Copy of a legal declaration of ownership consent to accompany the planning application.</li> </ul>	
Private Ownership (non-agreement)	Where the owner of the relevant existing development refuses to agree to the delivery of the proposed permeability link(s), KCC (in limited circumstances) will provide support through the Compulsory Purchase Order (CPO) process based upon the strategic importance of the proposed permeability link(s).  CPO will be done at the cost of the developer.  Proof of engagement with KCC to accompany the planning application.	

<sup>3.</sup> Vesting is the point in time when the rights and interests arising from legal ownership of a property are acquired by some person.

#### 4.1.2 Public Consultation

Non-Statutory
Consultation
Notify affected
parties of proposed
permeability link(s).

In advance of the Planning Stage

Statutory
Consultation
Submissions /
observations invited
for a period of 5
weeks.

Planning Stage

#### 4.1.2.1 Non-Statutory Consultation

Kildare County Council requires applicants to notify parties that could potentially be affected by the development of a proposed permeability link(s) in advance of the planning stage. This consultation is only required for links that have not previously undergone consultation as part of a Local Area Plan (LAP) process.

The method of consultation will depend on the scale and context of the proposed development and could include some or all of the following actions:

- → A leaflet drop,
- A public meeting,
- → A meeting with management companies / resident associations,
- → Informing the property owners in the street(s) directly affected by the proposed link(s).

A declaration outlining how the applicants consulted should accompany all applications for proposing permeability links.

#### **4.1.2.2 Statutory Consultation**

Public Notice of a proposed development should be given within two weeks of lodging a planning application. This must be done in accordance with the Planning and Development Regulations 2001 to 2008, as follows:

- → by publishing a notice in a newspaper circulating in the locality; and
- by erecting a site notice.

A submission or observation in relation to the application may be made to Kildare County Council (KCC) in writing within the period of 5 weeks beginning on the date of receipt by KCC of the application.

#### 4.2 Retrofitting Permeability

#### **Kildare County Development Plan (2023-2029)**

**Action TM A12** Seek funding to develop Local Permeability Schemes in conjunction with the NTA in order to maximise access to town centres, local shops, schools, public transport services and other amenities.

#### 4.2.1 Scheme Identification and Initial Screening

As described in Section 3.2 of this guidance document, permeability measures will be identified for each of the Local Area Plan (LAP) settlements during the preparation of settlement specific Area Based Transport Assessments (ABTAs). As part of this process permeability measures will undergo an **initial screening stage** (Table 5 refers) to ensure the usefulness of the identified permeability measures as well as to consider the personal security of those pedestrians/cyclists that will use the links.

Table 5: Initial Screening of Permeability Measures

Initial Screening	[/]
Directness	
Will the proposed permeability measure provide a more direct route to at least one key destination?	
Personal Security	
Is passive surveillance considered, i.e., is the proposed permeability measure in an area which is/will be overlooked?	



#### 4.2.2 Appraisal and Prioritisation

After the initial screening stage, the identified permeability measures will be prioritised based on the results of a **benefit assessment** of each permeability measure. Appendix H includes the KCC template for this assessment and Table 6 below summarises the output of same. The assessment utilises walk time improvements and cycle time improvements as proxies to indicate an improvement in performance relevant to the Climate Action Plan 2023. It is not possible to utilise the Climate Action Plan 2023 KPIs literally in this assessment as readily available data sources do not exist to enable such an assessment (e.g. 50% increase in daily active travel trips, as per Transport chapter, Table 15.6, p193).

Where a benefits assessment of an individual permeability measure doesn't highlight any real benefit but represents a crucial link of a network of interdependent permeability links on subarea level, the impact needs to be assessed on subarea level as provided for under part 1b, 2b and 3b of the KCC template in Appendix H. Table 7 below summarises the output of same.

The highest score between Table 6 and Table 7 will be used to prioritise the permeability measures in the ABTA.

Table 6: Benefits Assessment of Individual Permeability Measures

Benefits Assessment		
Link ID and Name:	[ID]	[Permeability Link Name]
Link Description:		
		SCORE
1. Trip Attractors		/10
2. Catchment Size Assessmen	nt	/10
3. Quality of Life / 10-minute neighbourhood  Total journey time savings to five key destinations.		/10
TOTAL SCORE	·	/30

Table 7: Benefits Assessment of an individual permeability link on sub-area level.

Benefits Assessment		
Link ID and Name:	[ID]	[Permeability Link Name]
Link Description:		
		SCORE
1. Trip Attractors		/10
2. Catchment Size Assess	/10	
<ol> <li>Quality of Life / 10-minute neighbourhood</li> <li>Total journey time savings to five key destinations.</li> </ol>		/10
TOTAL SCORE		/30

#### 4.2.3 Progressing Permeability Measures

The approach to delivering the permeability measures included in the Local Area Plans of County Kildare are divided into three main groups:

## Small Permeability Improvement Projects

- Singular permeability openings. (Removing a small section of physical barriers.)
- → Formalising strong desire lines.
- Upgrading exising pedestrian/cycle links.

# Group of interconnected permeability measures

\*Overall cost of the development will exceed €126,000

## Large Active Travel Projects which includes permeability measures

\*Overall cost of the development will exceed €126,000

#### 4.2.3.1 Consenting Mechanisms

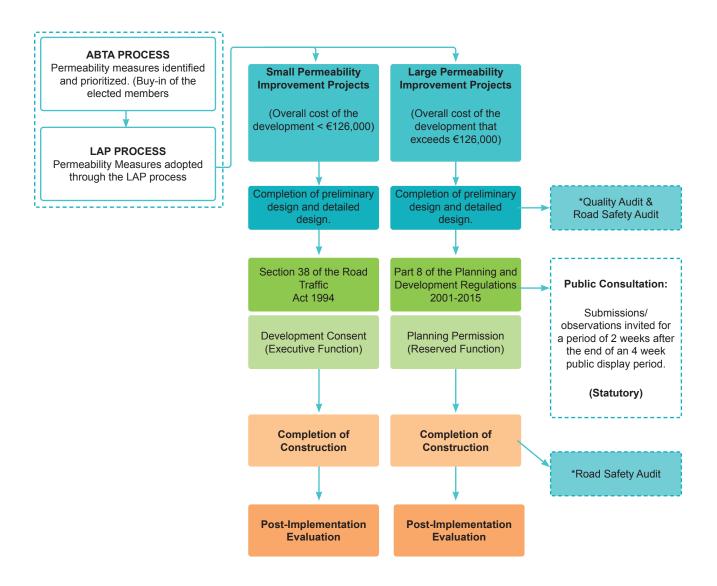
Planning permission for larger projects with an overall development cost that exceeds €126,000 shall be applied for under Part 8 of the Planning and Development Regulations 2001-2015, and the procedure is set out in Part 11, Section 179 of the Planning and Development Act 2000 as amended.

Consent for the development of all other smaller permeability improvement projects shall be applied for under Section 38 of the Road Traffic Act 1994. Section 38 is a consenting mechanism for "traffic calming measures" that benefit all road users, including pedestrians and cyclists, relating to the use of road corridors and access to them.

Figure 6 below sets an overview of both the Part 8 and Section 38 process for consent to deliver permeability link(s).



Figure 6: Consenting Mechanisms for Retrofitting Permeability



"NGS Circular 3 of 2022. Quality Audits and Road Safely Audits on Public Roads in Ireland Dated: 7th June 2022

#### 4.2.3.2 Stakeholder Engagement

#### Part 8 process

The procedure of the Part 8 planning process is set out in Part XI, Section 179 of the Planning and Development Act 2000 (as amended). This procedure requires that notice of the proposed permeability link(s) be given in an approved newspaper and that a site notice be erected on the land on which the proposed link would be situated. Submission or observations are accepted not less than 2 weeks after the end of the 4 weeks public display period.

#### Section 38 process

Section 38(3) of the Road Traffic Act 1994 states that:

- '(3) Before providing or removing traffic calming measures under this section of such class or classes as may be prescribed, a road authority shall—
- (a) consult with the Commissioner;
- (b) publish a notice in one or more newspapers circulating in the functional area of the authority—
  - (i) indicating that it is proposed to provide or remove the measures, and
  - (ii) stating that representations in relation to the proposal may be made in writing to the road authority before a specified date (which shall be not less than one month after the publication of the notice);
- (c) consider any observations made by the Commissioner or any representations made pursuant to paragraph (b) (ii).'

Since the Minister has not yet prescribed such class or classes there is no current legal obligation to comply with the consultation requirements set out in subsection 38(3) of this Act. However, Kildare County Council (KCC) as an organisation is **committed to consulting the public** during the Section 38 consenting process as well as the Part 8 process to ensure transparency during the process of retrofitting permeability.

As a minimum, a typical public consultation strategy will include the following complementary measures to notify the public of proposals for Permeability Improvement Projects:

- → Provide details on Kildare County Council's "Consult" website of the development proposal and how to make an observation;
- → Utilise KCC Social Media platforms and website to publicise the development proposal and how to make an observation; and
- → Brief Local Councillors on the project and preliminary design.

**Definition:** Under the Road Traffic Act 1994 "traffic calming measures" means measures which restrict or control the speed or movement of, or which prevent, restrict or control access to a public road or roads by, mechanically propelled vehicles (whether generally or of a particular class) and measures which facilitate the safe use of public roads by different classes of traffic (including pedestrians and cyclists) and includes the provision of [various] works or devices....to reduce or modify the width of the roadway and landscaping, planting or other similar works.

#### 4.2.3.3 Design

The various consultation stages outlined in Section 4.2.3.2 provides KCC with an opportunity to obtain feedback from residents and local councillors on pre-liminary designs and to highlight their key areas of concern. Through good design concerns such as 'anti-social behaviour' may be overcome.

Additionally, KCC will set elevated expectations for permeability links of strategic significance or links that could cater to a larger catchment area.

KCC will aim to meet the 'Level A' quality design standards as set out in the Permeability Best Practice Guide (2015) for pedestrian/cycle links, to ensure the delivery of high-quality permeability measures:

→ Width: 4m+

→ Surface: Completely smooth

→ Lighting: Fully lit

→ Security: Fully overlooked

In certain circumstances, achieving the desired width may not be feasible due to physical constraints. In such instances, a reduced width would be acceptable, particularly in scenarios with anticipated low traffic volumes and where it's not a shared pedestrians/cyclists link. Furthermore, it may not be possible to provide overlooking at all locations along a permeability measure, given prevailing patterns of development.

The 'Class 1' and 'Class 2' design standards for urban areas set out in the Classification and Grading for Recreational Trials (2008) should be considered for pedestrian/cycle links associated with recreational trials.

#### 4.2.3.4 Road Safety and Quality Designs Audits

When progressing the delivery of permeability measures as part of larger active travel schemes/ projects which includes permeability links, Kildare County Council shall have regard to the NGS Circular 3 of 2022, 'Quality Audits and Road Safety Audits on Public Roads in Ireland' which requires Road Safety Audits and Quality Audits on schemes or works on public roads or proposed public roads, including active travel-related projects.

Quality Audits and Road Safety Audits will be carried out at specific stages during the delivery of larger active travel schemes/projects as outlined in Table 8 below.



Table 8: Road Safety and Quality Audit Stages

Type and Complexity of Scheme	Stage F	Stage 1	Stage 2	Stage 3	Stage 4
Schemes/Works with estimated Construction Cost <i>greater than</i> €0.5m incl. VAT	Road Safety Audit and Quality Audit	Road Safety Audit and Quality Audit	Road Safety Audit and Quality Audit	Road Safety Audit	Road Safety Audit
Schemes/Works with estimated Construction Cost <i>less than</i> €0.5m incl. VAT		Road Safety Quality Audit		Road Safety Audit	

Stage F: Route selection stage;

Stage 1: Completion of preliminary design;

Stage 2: Completion of detailed design;

Stage 3: Completion of construction;

Stage 4: Early operation.

Source: NGS Circular 3 of 2022. Quality Audits and Road Safety Audits on Public Roads in

Ireland. Dated: 7th June 2022

#### 4.2.3.5 Compulsory Purchase Order

Local authorities have powers under Section 213 of the Planning and Development Act 2000 (as amended) to acquire land to enable it to fulfil its functions. Kildare County Council may, in exceptional circumstances, consider the use of its powers to compulsorily acquire land in the interests of the common good where:

- → Land is required to deliver a statutory objective outlined in the County Development Plan (CDP), a Local Area Plan (LAP) or other statutory documents;
- → The benefits of the proposed permeability measure are strategic in nature in that it will result in broad-based benefits (e.g. it will serve a large catchment, will result in a significant increase in the number of people accessing services, etc.).

#### 4.2.3.6 Post-Implementation Evaluation

Kildare County Council commits to post-implementation evaluation of major projects involving active travel projects as categorised in Section 4.2.3 i.e. Group of interconnected permeability measures or for large active travel projects which includes permeability measures.

Post-Implementation Evaluation will include an annual report listing all projects completed during the year, an overview of successes and items identified for improvement in future major active travel projects.

**Appendix I** includes a case study which showcases the connectivity/permeability improvement of a housing estate in Maynooth as a result of retrofitting permeability along desire lines.

# 5 Appendices

## APPENDIX A: POTENTIAL OF IMPROVED NEIGHBOURHOOD CONNECTIVITY

The following four examples illustrates the great potential of improved neighbourhood connectivity in County Kildare, as follows:

Example 1

(Insert a universally accessible access/egress point in the palisade fence to reduce the walking distance to educational facilities),

Example 2

(Insert a universally accessible access/egress point in the wall to reduce the walking distance to **retail facilities**),

Example 3

(Insert a universally accessible access/egress point in the wall to reduce the walking distance to **public transport facilities**), and

Example 4

(Formalising existing desire lines to reduce the walking distance to areas of recreational amenity).

NOTE: The following locations are for demonstration purposes only and should not be construed as proposals for permeability projects at the locations identified.

# Insert a universally accessible access/egress point in the palisade fence to reduce the walking distance to educational facilities.

The example below indicates a location where there is potential to provide connectivity between Oldtown Mill housing estate and adjacent developments and facilities.

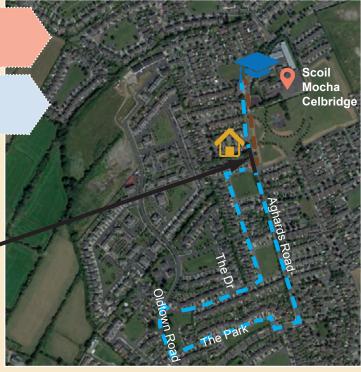
Identifying the barriers which extend door to door walking distances and then retrofitting sensitively and appropriately designed permeability could significantly improve the quality of lives of the residents of Oldtown Mill Housing Estate, their accessibility to local services and reduce the need for the use of a private car for short/local journeys. For example, the walking distance of Household X to the local primary school can be reduced by ±1360m (from ±1580m to ±220m) as illustrated in the example below. This is a very big difference in walking distance, especially for primary school aged kids who need to carry their schoolbags to and from school. The walking distance to the playground, the childcare facility, the Aghards House neighbourhood centre (including hairdresser, shop, ATM, etc.), the Castle Village neighbourhood centre (including shop, take-aways, barber, etc.) and the Aldi, all located along Aghards Road, can also be reduced to be within a walking distance of 620 meters of Household X.

Walking Distance to School + 1360 meters shorter

Help meet the modal shift targets of increased trips to education by walking.



View of the Permeability Barrier. High palisade fence segregating development areas.





Χ





Existing shortest walking route (±1580m) to Scoil Mocha Celbridge

Improved Permeability: More direct route (±220 m) to Scoil Mocha Celbridge

#### Example: Insert a universally accessible access/egress point in the wall to reduce the walking distance to retail facilities.

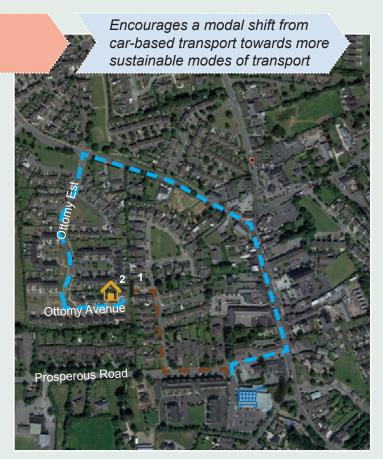
Ottomy Estate in Clane is an example of a housing estate characterised by various culde sacs with no direct routes to existing neighbouring developments or local services and facilities. The example below illustrates the potential to improve the permeability or connectivity of Ottomy Estate by retrofitting permeability between Ottomy Estate and Liffey Lawns to reduce the walking distance to Aldi by  $\pm$  730 m (from  $\pm$  1040 m to  $\pm$  310 m).

Walking Distance to Aldi ± 730 meters shorter





View 1 and 2 of the Permeability Barrier. High wall segregating development areas.







Clane

Permeability Barrier

Existing shortest walking route (±1040 m) to Aldi in Clane

Improved Permeability: More direct route (±310 m) to Aldi in Clane.

# Example: Insert a universally accessible access/egress point in the wall to reduce the walking distance to public transport facilities.

The example below shows a household in College Farm Newbridge whose walking distance to Newbridge train station could reduce by  $\pm$  500m (from  $\pm$ 1000m to  $\pm$ 500m) by removing a section of the wall (physical barrier) between College Farm and the Great Southern housing estates to provide a more direct route to the Newbridge Train Station.

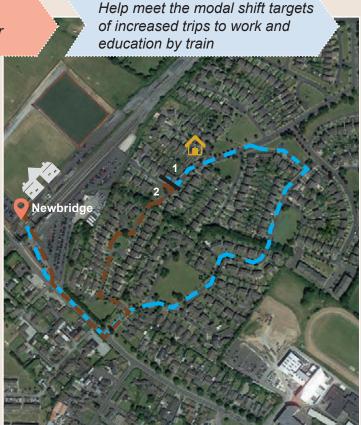
By providing connections to public transport services, access to these services will be improved and increased levels of use may be expected. This in turn could support the enhancement of public transport services such as increased frequency.

Walking Distance to Train Station ± 500 meters shorter





View 1 and 2 of the Permeability Barrier. High wall segregating development areas.







Station

Permeability Barrier

Existing shortest walking route (± 1000m) to Newbridge Train Station

Improved Permeability: More direct route (±500 m) to Newbridge Train Station

# Example: Formalising existing desire lines to reduce the walking distance to areas of recreational amenity.

The example below provides an example of a household along Millbridge Way in Naas whose walking distance to an amenity walk along the canal could reduce by  $\pm$  550m (from  $\pm$ 740m to  $\pm$ 190m) by formalising an existing desire line between Millbridge Way and Canal Bank. This example shows the potential of a simple intervention to improve the quality of lives of communities in County Kildare.







Natural desire line

Existing shortest walking route (± 740 m) to the Canal Bank.

Formalising existing desire lines: Walking distance of ± 190 m to the Canal Bank.

### APPENDIX B: LEGISLATION FOR PLANNING, DEVELOPMENT AND CLIMATE ACTION

# Planning and Development Act, 2000 (as amended) PART II, Plans and Guidelines

#### **Chapter I, Development Plans**

#### Obligation to make development plan.

**9(6)** A development plan shall in so far as is practicable be consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development.

#### Content of development plans.

- **10(2)** Without prejudice to the generality of subsection (1), a development plan shall include objectives for-
  - (n) the promotion of sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to—
    - (i) reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources,
    - (ii) reduce anthropogenic greenhouse gas emissions and address the necessity of adaptation to climate change, taking account of the local authority climate action plan (within the meaning of section 14B of the Climate Action and Low Carbon Development Act 2015), where such a plan has been made for the area in question, in particular, having regard to location, layout and design of new development.

#### **Chapter II, Local Area Plans**

#### Application and content of local area plans.

- 19(2) A local area plan shall be consistent with the objectives of the development plan, its core strategy, and any regional spatial and economic strategy that apply to the area of the plan and shall consist of a written statement and a plan or plans which may include—
  - (a) objectives for the z oning of land for the use solely or primarily of particular areas for particular purposes, or
  - (b) such other objectives in such detail as may be determined by the planning authority for the proper planning and sustainable development of the area to which it applies, including the objective of development of land on a phased basis and, detail on community facilities and amenities and on standards for the design of developments and structures.
- (2A) Each planning authority within the GDA shall ensure that its local area plans are consistent with the transport strategy of the DTA.
- (2B) Where any objective of a local area plan is no longer consistent with the objectives of a development plan for the area, the planning authority shall as soon as may be (and in any event not later than one year following the making of the development plan) amend the local area plan so that its objectives are consistent with the objectives of the development plan.

#### Climate Action and Low Carbon Development Act, 2015 (as amended)

#### **Duties of certain bodies**

- **15(1)** A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—
  - (a) the most recent approved climate action plan,
  - (b) the most recent approved national long-term climate action strategy,
  - **(c)** the most recent approved national adaptation framework and approved sectoral adaptation plans,
  - (d) the furtherance of the national climate objective, and
  - **(e)** the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

#### **APPENDIX C: CASE STUDY**

Delivery of a permeability link between a new development and an existing development in Kill, County Kildare.

(KCC Planning Ref. 20/307013)







Permeability link description:

Permeability link between an existing development and a new development which includes 164 dwellings, a site reserved for the development of a crèche and a heritage trial.

In accordance with TM O20 of the Kildare County Development Plan 2023-2030:

Ensure new development areas are fully permeable for walking and cycling at a minimum, public transport (where appropriate) and provide for filtered permeability for private vehicle access in accordance with the NTA Permeability Best Practice Guide in order to give a competitive advantage to active travel modes for local trip making.

## APPENDIX D: KCC BENEFITS ASSESSMENT TEMPLATE FOR NEW DEVELOPMENTS

Clearly outline the benefits of each proposed permeability link by including a benefits assessment of each proposed link in the planning application. The template below shall be used by applicants for benefit assessments and the content thereof shall be verified by KCC planning officials.

1. Trip Attractors					
Number of trip attractors which will benefit from improved access	[Number of trip attractors and names of same]				
2. Catchment Size	Assessment				
Population* within 800m (crow flies)					
3. Quality of Life /	10-minute neig	hbourhood			
3.a	Key destination	ons (by commu	ınity need) **		
1	[Primary School	ol]			
2	[Bus Stop]				
3	[Healthcare]				
4	[Post-Primary	School]			
5	[Local Centre]				
Calculated Walking	g Distances (ar	nd times) to Ke	y Destinations		
	Prior Condition	ns	Anticipated Im	pact	Walk Time Saving (min) ***
	Distance (m)	Walk Time (min) ***	Distance (m)	Walk Time (min) ***	
1					
2					
3					
4					
5					
3.b	Community G	ain from increa	ased integratio	n	Comments:
Does the proposed development enhance permeability between the existing and planned development areas as well as future development areas?		Yes	No		
Does the permeability link form part of a more strategic network of other links for wider patterns of movement?			Yes	No	
Does the new link improve access to green space, wildlife and amenities for existing/future residents?			Yes	No	

4. Future benefits
The immediate advantages of the proposed permeability measure may not always be substantial; however, they could potentially yield numerous future benefits as the settlement develops over time.
Name potential future benefits:

Source: NTA, Permeability Best Practice Guide (2015)

- \* **Population** Multiply the count of residential units located within a 800-meter radius of the proposed link, measured in a straight line (crow flies), by the average household size of the relevant small area(s) based on the latest Census Small Area Population Statistics (SAPS).
- \*\* **Key destinations** Choose the top five key destinations that the suggested permeability measure would enhance access to. These destinations may encompass education facilities, healthcare facilities, public transport facilities, local centres, leisure facilities, open spaces, parks, local wild spaces, etc.
- \*\*\* Walk time Calculations should be based on an average walking speed of 80 meters per minute, equivalent to 800 meters per 10 minutes.

### APPENDIX E: KCC DESIGN ASSESSMENT TEMPLATE FOR NEW DEVELOPMENTS

The KCC Design Assessment Template is based on the 'Key Assessment Metrics' for the assessment of permeability schemes as set out in Table 7.1 of the *Permeability Best Practice Guide* (National Transport Authority, 2015) and the key considerations for ensuring the design and layout of new developments allows for permeability as outlined in Section 3.3 of the *Design Manual for Urban Roads and Streets* (Government of Ireland, 2012).

#### 'Crime Prevention Through Environmental Design' (CPTED)

The design assessment also has regard to the 'Crime Prevention Through Environmental Design' (CPTED) theory. CPTED is defined as "the proper design and effective use of the built environment that can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life."

Key considerations for ensuring qu		Comments / Proposed Mitigation Measures			
Directness				[1]	
Evidence of short cuts (in addition to the proposed permeability link)?	Y	es		No	
Personal Security				[/]	
Is passive surveillance considered, i.e., is the proposed permeability link overlooked by properties or public spaces?	Fully Parti		•		
Is public lighting provided for?	Y	es	No		
Extent of sight lines?	> 5m	> 10m	> 20m	> 30m	
Road Safety				[√]	
Potential for conflict - e.g., between pedestrians, cyclists, and cars?	Yes		No		

Key considerations for ensuring qu	Comments / Proposed Mitigation Measures				
Inclusivity					
Proposed permeability link of	4m or	>		< than 4m	
adequate width?					
(Preferred width of 4 metres)					
Proposed permeability link of	Yes			No	
adequate gradient? (Preferred					
maximum gradient - 1:20 / 5%)				[ /]	
Quality of the Environment			[/]		
Is soft landscaping considered - e.g. planting to improve the environment (where possible)?	Yes			No	
Quality of the proposed pavement surface?	Good			Bad	
<b>Proposed Development: Site layout</b>	and Design			[/]	
Site layout includes permeability	Yes		No		
link(s) to existing developments and/ or to future development areas?					
Regard given to the size of blocks within the street network and how they impact on permeability? <sup>4</sup>	Optimal Block Size: 60-80m	Larg Bloc Size: U 100	ks lp to	Large/ Irregular Block Size: Up to 120m	

<sup>4.</sup> Section 3.3.2 of the Design Manual for Urban Roads and Streets (May 2019)

#### APPENDIX F: PUBLIC NOTICE EXAMPLE

Example of a public notice that includes the full details of the proposed connections/permeability measures.

Kildare County Council Planning Department

3 1 MAR 2021

Planning and Development (Housing) and Residential Tenancies Act 2016

Planning and Development (Strategic Housing Development) Regulations 2017

#### Notice of Strategic Housing Development Application to An Bord Pleanála

Mc Court Investments Limited intend to apply to An Bord Pleanála for permission for a strategic housing development at Earl's Court, Kill Hill, Kill, Co. Kildare

The development will consist of a Residential development of 167 no. dwellings, 1 no. vehicular link at Kill Hill Lane, 1 no. vehicular connection to The Avenue, Earl's Court, two further pedestrian/cycle links at No. 16 The Green and 52 The Drive, Earl's Court, the provision of a new Heritage Trail and all associated and ancillary site development works.

Details of the dwelling types are as follows: 2 no. "Type A", 3-Bed, 2.5 Storey Houses; 2 no "Type B", 4-Bed, 2.5 Storey Houses; 24 no. "Type C", 3-Bed, 2 Storey Houses; 14 no. "Type D", 2-Bed Apartments; 14 no. "Type E", 2-Bed Apartments; 5 no. "Type F", 3-Bed, 2 Storey Houses; 10 no. "Type G1", 1-Bed Apartments; 2 no "Type G2", 1-Bed Apartments; 2 no. "Type G3", 2-Bed Apartments; 10 no. "Type G4", 2-Bed Apartments; 24 no. "Type H", 3-Bed, 2 Storey Houses; 9 no. "Type H2", 3-Bed, 2 Storey Houses; 2 no. "Type J", 3-Bed, 1 Storey Houses; 13 no. "Type K", 4-Bed, 2 Storey Houses; 14 no. "Type L", 2-Bed, 2 Storey Houses; 3 no. "Type L2", 2-Bed, 2 Storey Houses; 1 no. "Type M", 2-Bed, 1 Storey House; 7 no. "Type N", 3-Bed, 2 Storey Houses; 1 no. "Type P", 1-Bed, 1 Storey House; 4 no. "Type Q", 1-Bed Apartments and 4 no. "Type R", 1-Bed Apartments

The application contains a statement setting out how the proposal will be consistent with objectives of the relevant development plan or local area plan.

The application contains a statement indicating why permission should be granted for the proposed development, having regard to a consideration specified in section 37(2)(b) of the Planning and Development Act, 2000, as amended, notwithstanding that the proposed development materially contravenes a relevant development plan or local area plan other than in relation to the zoning of the land.

The application may be inspected, or purchased at a fee not exceeding the reasonable cost of making a copy, during public opening hours at the offices of An Bord Pleanála and Kildare County Council. The application may also be inspected online at the following website set up by the applicant: www.killhill3.com

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Any person may, within the period of 5 weeks beginning on the date of receipt by An Bord Pleanála of the application and on payment of the prascribed fee of €20 (except for certain prescribed bodies), make a submission or observations in writing to An Bord Pleanála, 64 Marlborough Street, Dublin 1, relating to the implications of the proposed development, if carried out, for proper planning and susteinable development in the area or areas concerned, and the likely effects on the environment or the likely effects on a European site, es the case may be, of the proposed development, if carried out. Submissions or observations duly made will be considered by An Bord Pleanála in meking a decision on the application. Such submissions or observations must also include the following information:

- (a) the name of the person, authority or body making the submission or observations, the name of the person, if any, acting on behalf of that person, authority or body, and the address to which any correspondence relating to the application should be sent,
- (b) the subject metter of the submission or observations, and
- (c) the reasons, considerations and arguments on which the submission or observations is or are based.

An Bord Pleanála may grant permission for the strategic housing development es proposed, or may grant permission subject to such modifications as it specifies in its decision, or may grant permission in part only, with or without any other modifications it may specify in its decision, or may refuse to grant permission for the proposed development. An Bord Pleanála may attach to a grant of permission such conditions as it considers appropriate.

Any enquiries relating to the application process should be directed to the Strategic Housing Development Section of An Bord Pleanála (Tel. 01-8588100).

Signed: Claire McManus, JFOC Architects (Agent)

Date of erection of site notice 27th March 2020

Site Notice

Version: 11 Márta 2020

#### APPENDIX G: KCC STANDARD PLANNING CONDITIONS

#### Case

# 1. Proposed permeability link(s) to adjoining lands [Future development lands/ proposed adjoining schemes].

#### **AND**

2. Proposed permeability link(s) to existing developments with no written consent from the landowner.

3. Proposed permeability link(s) to existing developments.
[Applicant secured the consent of the owner(s) of the existing development.]

(Permeability Design has been agreed/consented as part of the planning permission)

#### Applicable KCC Standard Planning Conditions

Proposed link to adjoining lands.

- a. The permeability link(s) indicated on drawing no.xxxx received by the Planning Authority on the xx/xx/xxxx, showing access between this permitted housing scheme and [name of future development lands / name of existing development] shall be developed right up to the property boundary at the permitted permeability link(s) to allow for the construction/provision of such required permeability link(s).
- **b.** Any boundary fencing along the permitted permeability link(s) shall be of a temporary nature only (ie. Paladine fence), and,
- **c.** Appropriate signage, made of durable materials, shall be erected at the permitted permeability link(s) and shall clearly indicate the requirement to develop a permeability link at that location.

**Reason:** In the interest of the reservation of lands to provide permeability link(s) and to clarify the works authorised by this permission.

Proposed link to existing developments (Permeability Design has been agreed/consented as part of the planning permission)

a. The permitted permeability link(s) as indicated on drawing no.xxx received by the Planning Authority on the xx/xx/xxxx, showing access between the permitted housing scheme and the existing development [name of existing development] shall be completed prior to the occupation of the first residential unit in the relevant phase unless otherwise agreed in writing with the Planning Authority.

**Reason:** In the interest of clarity and to ensure the completion of necessary services within the development.

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4. Proposed permeability link(s) to existing developments.
[Applicant secured the consent of the owner(s) of the existing development.]

(The design of the proposed permeability link(s) has not been agreed/consented as part of the planning permission)

#### **Applicable KCC Standard Planning Conditions**

Proposed link to existing developments (Permeability Design has not been agreed/consented as part of the planning permission)

- a. The design of the permeability link(s) between the permitted housing scheme and the existing development [name of existing development] shall be approved in writing by Kildare County Council prior to the commencement of above-ground construction.
- **b.** The approved permeability link(s) shall be completed prior to the occupation of the first residential unit in the relevant phase of the permitted residential development unless otherwise agreed in writing with the Planning Authority.

**Reason:** In the interest of clarity and to ensure the completion of necessary services within the development.

# APPENDIX H: KCC BENEFITS ASSESSMENT TEMPLATE FOR THE ABTA PROCESS

#### **KCC Benefits Assessments Template**

Permeability Link Detai	Is				
Link ID and Name:	[ID]	[/	Permeability Link Name]		
Link Description:					
Date of assessment:					
1. Trip Attractors					
Number of trip attractors benefit from improved ac		[Number of trip attract	ors and names of same]		
1a. Scoring of Trip Attra	actors				
		How to apply scoring:	Score		
Number of trip attractors which will benefit from improved access	[Number of trip attractors]	To be applied at the discretion of KCC.			
		icable to permeability li rk of interdependent linl			
1b. Scoring of Trip Attra	actors				
		How to apply scoring:	Score		
Number of trip attractors which will benefit from improved access	[Number of trip attractors]	To be applied at the discretion of KCC.			
2. Catchment Size Asse	essment				
Population* within 800m (crow flies)					
Population within 800m (through network)**					
2a. Scoring of Catchme	ent Size				
		How to apply scoring:	Score		
Performance against theoretical maximum	[%]	To be applied at the discretion of KCC.			
(Network/Crow flies)	[Number of people]	To be applied at the discretion of KCC.			
Section 2b below only applicable to permeability links that forms part of a network of interdependent links.					

2b. S	2b. Scoring of Catchment Size							
					How to apply	scoring:	Score	
subject for the of an	tance of the ct proposed e deliverabil interdepend ork of links.	link ity	To be applied at the discretion of KCC.					
people from t propo links i service		enefit of the of of of	[Number of people] To be applied at the discretion of KCC.					
			nute neighbou					
,	estinations	(by comn	nunity need)***					
1								
2								
3								
4								
5								
Calcu		_	Cycling Distar	nces (and	d times) to Ke	y Destinat		
	Prior Cond	ditions		Anticipa	ated Impact		Time Savi	ng
	Distance (m)	Cycle time (min)****	Walk time (min)*****	Distance (m)	e Cycle time (min)****	Walk time (min)*****	Cycle time Savings (min)****	Walk time Savings (min)****
1							,	
2								
3								
4								
5								
3a. Sc	coring of to	tal journ	ney time savin	gs to five	e key destinat	ions		
					How to apply	scoring:		Score
saving	ige cycle timg to top 5 nations	ne	To be applied at the discretion of KCC.					
saving	Average walk time To be applied at the discretion of KCC. saving to top 5 destinations							
	Section 3b below only applicable to permeability links that forms part of a network of interdependent links.							

3b. Scoring of total journey time savings of the network of links						
	How to apply scoring:	Score				
Cumulative average cycle time saving to top 5 destinations.	To be applied at the discretion of KCC.					
Cumulative average walk time saving to top 5 destinations	To be applied at the discretion of KCC.					

- \* **Population -** Multiply the count of residential units located within an 800-meter radius of the proposed link, measured in a straight line (crow flies), by the average household size of the relevant small area(s) based on the latest Census Small Area Population Statistics (SAPS).
- \*\* **Population within 800m (through network) -** Calculation of the number of people within 800m (approximately a 10-minute walk) of the scheme through the road and path network.
- \*\*\* **Key destinations** Choose the top five key destinations that the suggested permeability measure would enhance access to. These destinations may encompass education facilities, healthcare facilities, public transport facilities, local centres, leisure facilities, open spaces, parks, local wild spaces, etc.
- \*\*\*\* **Cycle time** Calculations should be based on an average cycling speed of 268 meters per minute.
- \*\*\*\*\* **Walk time** Calculations should be based on an average walking speed of 80 meters per minute, equivalent to 800 meters per 10 minutes.

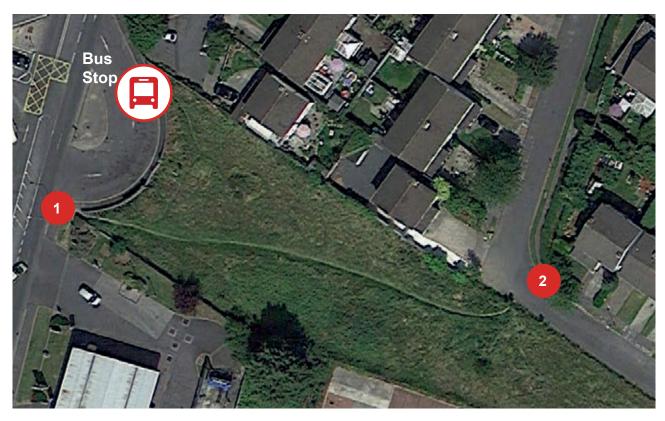
#### **APPENDIX I: FORMALISING EXISTING DESIRE LINE**

**CASE STUDY: Carton Court, Maynooth** 

#### **Before**







A major desire line was evident from the path worn into the grass between Carton Court and Straffan road.

#### After



#### Formalising existing desire line

+ 300 meters shorter walking distance to Lidl, the bus stop and the Maynooth Business Campus.

#### **Project Benefits:**

- → Walking distance from Carton Court to the bus stop along Straffan Road reduced by ± 300 meters (from ± 400 meters walk to ± 100 meters walk).
- → Walking distance from Carton Court to Lidl along Straffan Road reduced by ± 300 meters (from ± 540 meters walk to ± 240 meters walk).
- → Walking distance from Carton Court to Maynooth Business Park along Straffan Road reduced by ± 300 meters (from ± 1100 meters walk to ± 800 meters walk).



