

Healthy Streets for Surrey

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4.4 Connectivity and thinking 'beyond the red line'

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to think 'beyond the red line' of a given plot of land and with its surroundings. A well-designed place is well making it easier to travel by foot, bike or public LTP4, and Active Surrey's Movement for Change. Both whilst supporting residents' physical and mental health. middle and which are connected by a permeable network their needs locally. Routes between home, town and be safe, direct, and enjoyable so that sustainable travel

the following key principles:

- To integrate successfully with its surroundings a development must 'plug in' to the existing street network.
- Designs must include a clear and permeable street hierarchy that connects to the existing street network and provides good internal [connectivity](#).
- This should be based on the street typologies set out in 4.2 Street typologies.
- Opportunities to connect development with neighbouring communities and facilities must be maximised and major [connectivity](#) gaps beyond the site boundary should be identified and addressed.
- This could be through the creation of new links, strategic corridors or by improving existing connections through the site and the wider area, including footpaths, bridleways, unofficial 'desire

lines' and cycle routes.

- Where possible, proposed routes should adhere to those outlined in existing or draft [neighbourhood](#) plans.
- Community consultation should also be used to identify wider opportunities for [connectivity](#) early in the design process.
- Particular attention should be given to how new and existing schools are accessed, in line with Surrey's 'Safe Routes to School' scheme which aims to prioritise sustainable, healthy and safe travel to schools and reduce congestion and air pollution.

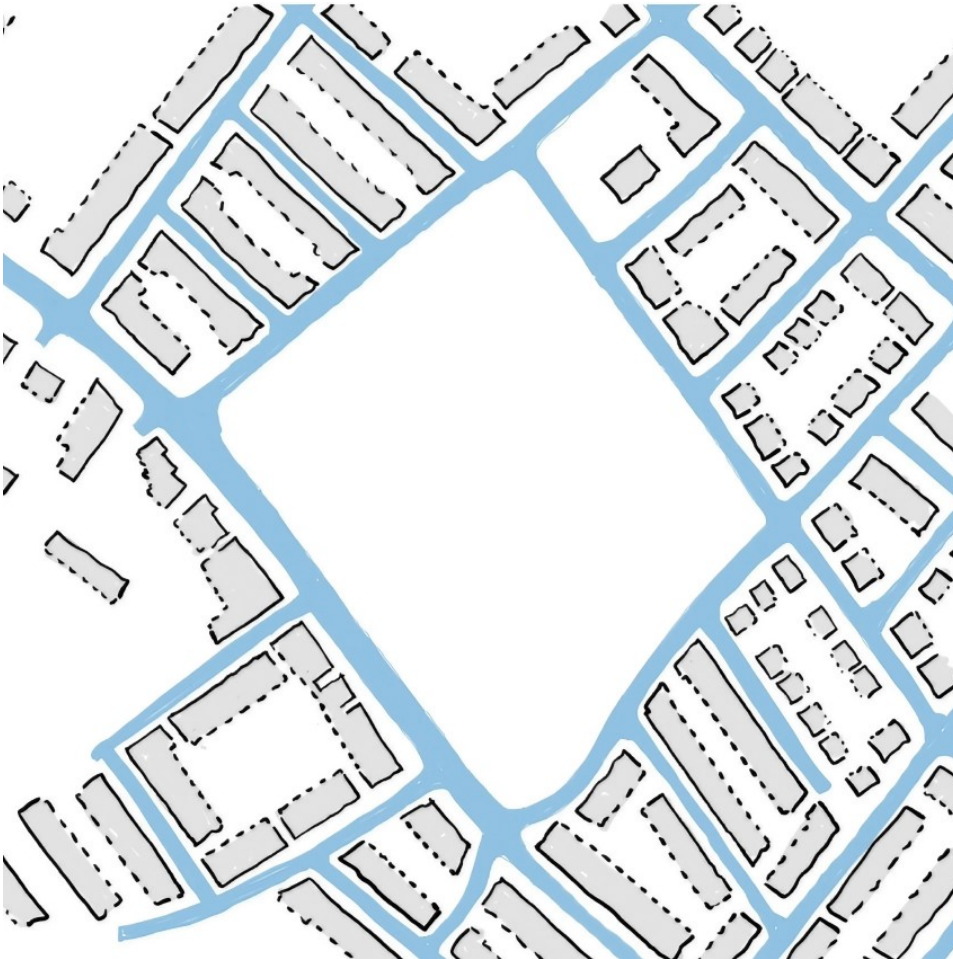


Figure 4-36a: Example development site, Integrating new developments into the existing urban fabric is essential (Credit - NMDC)



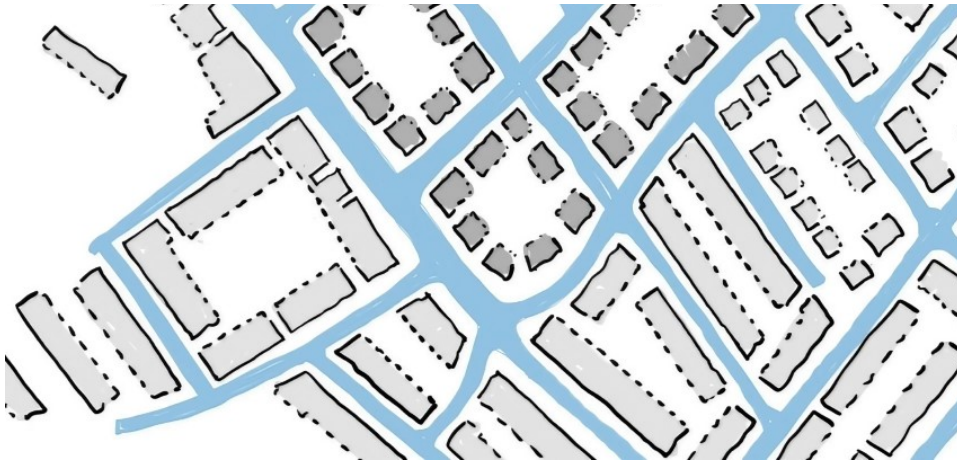


Figure 4-36b: Example of integrated site, Integrating new developments into the existing urban fabric is essential (Credit - NMDC)

Developments should provide at least two vehicle access points if there are more than 50 homes. It is recognised constraints of topography and ownership will mean that this is not always feasible, and this requirement should be assessed on a site-by-site basis.

Where secondary vehicle access is not feasible, additional pedestrian and cycle access should be provided wherever possible to maximise permeability for [sustainable transport](#) modes.

Access points can be filtered to reduce vehicular through traffic on residential streets, however these should be designed to accommodate emergency vehicular access.

Ensuring future [connectivity](#)

Layouts should not prevent future [connectivity](#), and where potential for future [connectivity](#) exists, such as where an adjacent site is allocated for development or redevelopment, a passive provision should be made in the site [layout](#) for future access point. This will enable the creation, over time, of a connected, permeable, and coherent urban fabric.

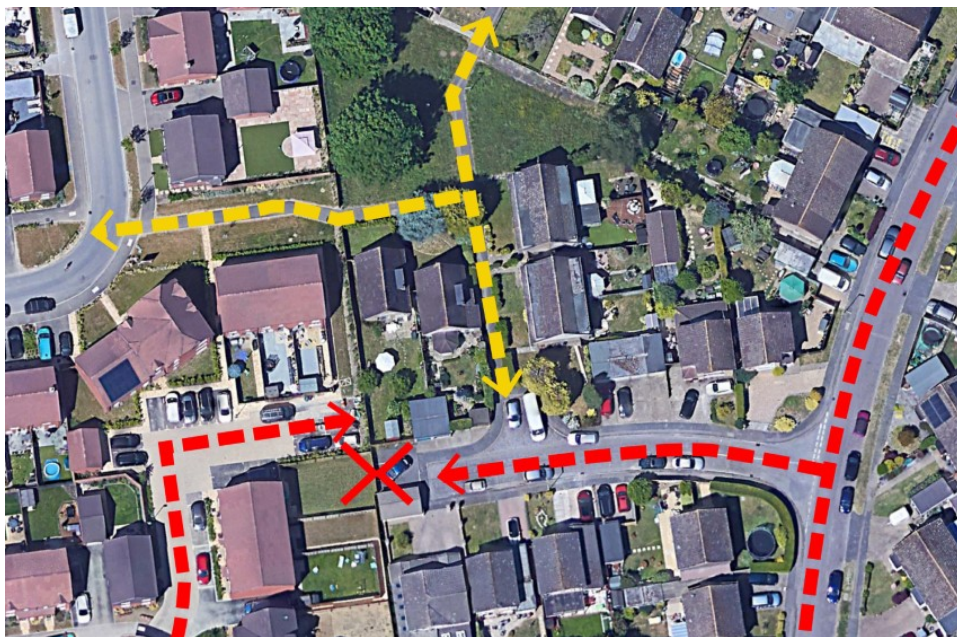


Figure 4-37: In this example, new streets do not connect into the existing street network. However, pedestrian and cycle permeability has been maintained through a well paved and overlooked route providing convenient active travel links into the wider area. (Credit - Google Earth (base)).

Designing pedestrian and cycle routes

The following measures will benefit new and existing communities and increase the appeal and

convenience of [active travel](#):

- Pedestrian and cycle routes must be well-lit, hard-surfaced and well-maintained.
- Routes must be overlooked and integrated into landscape corridors where possible.
- Narrow, unlit routes with 90° bends, flanked by high walls, fences or hedges must be avoided.
- Benches and resting points must be provided frequently along pedestrian links.
- Existing Public Rights of Way which run through sites must be maintained but can be diverted under to better integrate them into the new site [layout](#), subject to statutory consultation and legal processes.
- Rights of way should be appropriately managed during construction to ensure they remain accessible.
- Where a closure is required, an alternative route must be provided.

Assessing local [connectivity](#)

A [connectivity](#) assessment must be undertaken for each site to understand the site context, local pedestrian / cycle connections, bus routes and walking and cycling proximity to the location of key facilities.

This assessment should be based on isochrones, which should be the actual catchments based on available walking routes, and not indicative circles that only show a straight-line distance (see figure 4-48 below).

While it is recognised that the detail of proposals changes through the lifetime of project, the proposed street network of a masterplan should be used as a basis for walkability assessment to provide a more detailed reflection of the site's accessibility.

A facility is considered accessible by foot if it is within a 10-minute, and ideally 5-minute, walk. Similarly, a convenient cycle is around 5 – 10 minutes. In line with the principles of the 20-minute [neighbourhood](#), most people's needs should be available within a 20-minute walk or cycle.

- Typical walking speed of 80m per minute. A 5-minute walk = c.400m, 10-minute walk = c.800m and 20-minute walk = c.1600m.
- Typical cycling speed of 240-400m per minute. A 5-minute cycle = 1,200m – 2000m. However, e-bikes could be used to unlock permeability and sustainable travel choices, particularly where topography may otherwise make such journeys unattractive.





Figure 4-38: Connectivity assessment using walking isochrones, this gives a more accurate reflection of an areas pedestrian and cycle permeability than relying on ‘as the crow flies’ distances (Credit – NMDC)



[4.3 Creating a street network](#)

[4.5 Permeability and walkability](#)



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