CONNECTIVITY

Networks operate on different levels: through traffic, vehicular traffic, public transport, pedestrian traffic, and cycling. They establish vital structural connections. The combined overlay of networks gives a reading of potential complexity of the area.

The combination of walkable neighbourhoods and a good vehicular and cycle network with a mix of relevant services in direct proximity reduces trips for everyday life necessities because distances are manageable without driving. This is the basis for promoting more sustainable lifestyles.

The incremental development of the area has resulted in a fragmented network of roads and public space. This condition is directly related to the problem of congestion as it generates movement and discourages the use of public transport and slow traffic.

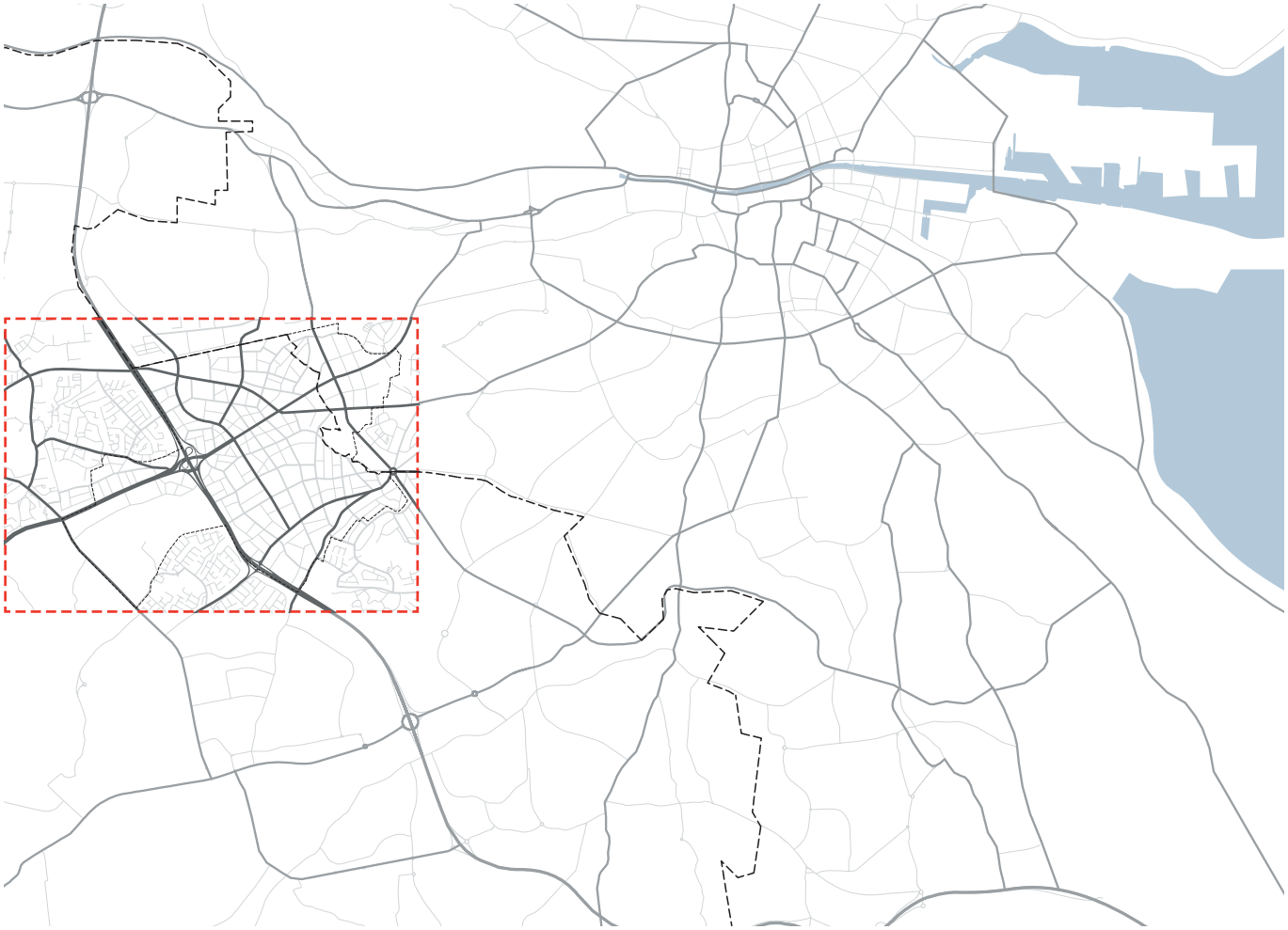
The Development Framework proposes the repair of the existing road pattern into a network that distributes traffic more evenly and that allows for more varied moving patterns.

The vehicular network, slow traffic network and public transport systems create a fabric for movement that reduces the pressure onto the M50; better alternatives connections and internal connectivity by introducing a street network hierarchy.

By providing a better connection between public transport stops, nodes in the network and the concentration of density, the use of public transport and slow traffic is promoted.

This is the basis for transformation towards a future oriented mobility.

The critical required links that will
That network is essent



establish a viable network structure are identified.
ial to establish and provoke meaningful connections.

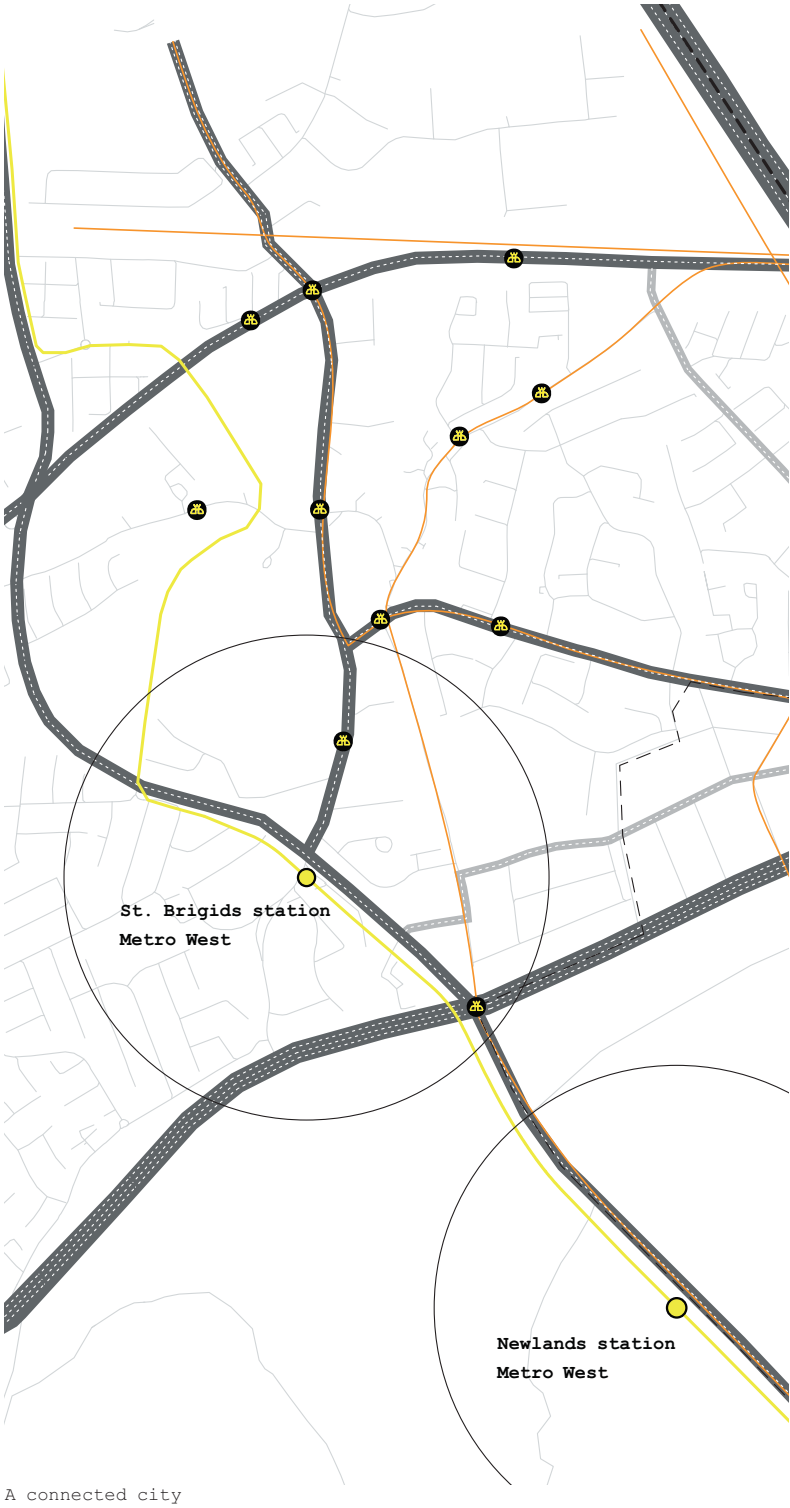
Networks

Vehicular connectivity is required within the study area independent of the National Primary road network.
The transformation of the existing streets into a vehicular network is as far as possible based on existing streets. Links needed to create the network can be new streets, elongations of existing streets, crossings where there where cul-de-sac conditions or simply a change of profile.

A second element of the connectivity strategy is the transformation of the Naas Road into an urban boulevard. The existing vehicular traffic patterns means the Naas Road is a divisive element splitting north and south. Critical rerouting of traffic, insertion of crossings and downscaling of the profile, allow the reconfiguration of the road corridor to a scale that allows for a more urban and liveable environment.

A third element in the improvement of connectivity is the introduction of a new Luas stop on the existing line, together with new bus lines that make larger parts of the area sufficiently accessible for more dense urban development.

A sustainable pattern of mixed development focused on the Luas and the repair/completion of the networks (public transport, car, pedestrian, cycling), together allow for a radical change in the modal split. Walkable neighbourhoods are then possible.



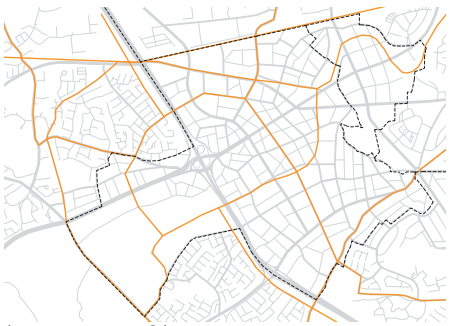
A connected city

primary road network
secondary road network
tertiary road network
slow traffic network
red Luas line
metro west
existing and new bus stops

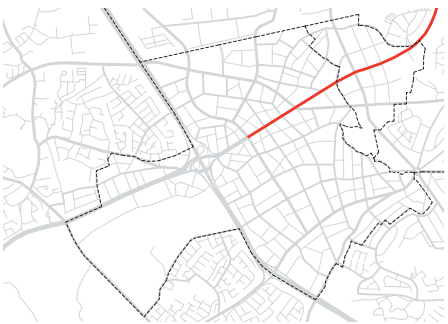
legend

primary road network

new Luas stop and new bus lines



important cycling routes



new Naas Road profile

new junctions

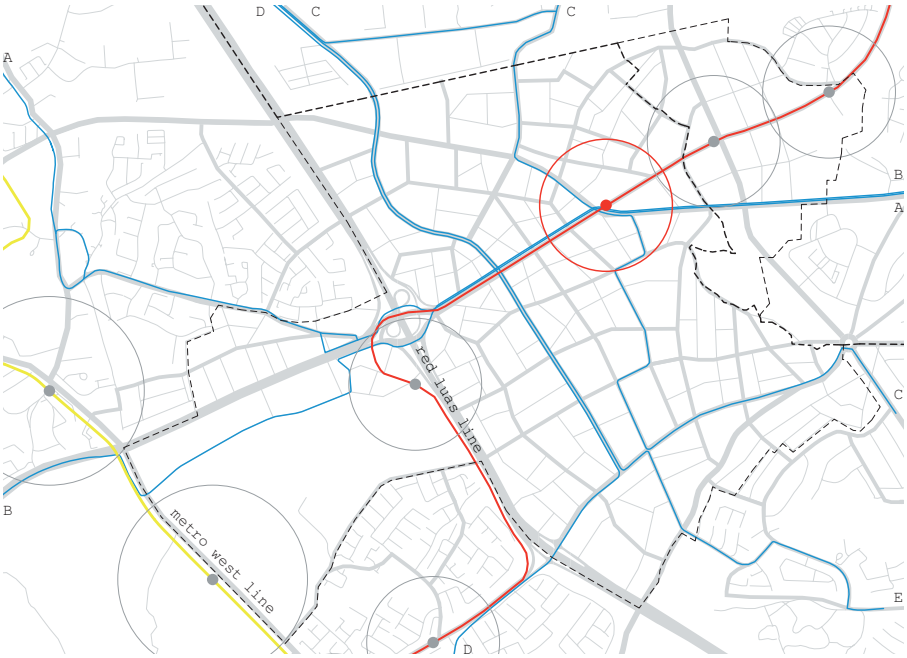
Vehicular network

The network is based on two principles. Firstly it links over the major barriers, being the Naas Road, The M50 and the N7, to make movement between the 4'quadrants' possible. Secondly it improves permeability of each quadrant by introducing crucial linkages. New connections allow north south movement across the Naas Road and avoid the concentration of traffic at the Naas Road / Long Mile Road junction. The network has a clear hierarchy. A primary network ensures the connections from and to the area. The Secondary Road Network (Bus Line C), shall incorporate bus lanes from the outset to accommodate future need as it arises. A secondary network ensures the linkages within the area and creates sufficient permeability for a cycle network. The position of streets on these two levels is fixed. The third level is the local network that creates the right plot sizes suitable for mixed use walkable neighbourhoods.
The Development Framework acknowledges planned, committed and constructed road infrastructure. Fine-tuning of the proposed vehicular network can be undertaken during the detailed analysis phase when developing the Area Briefs.

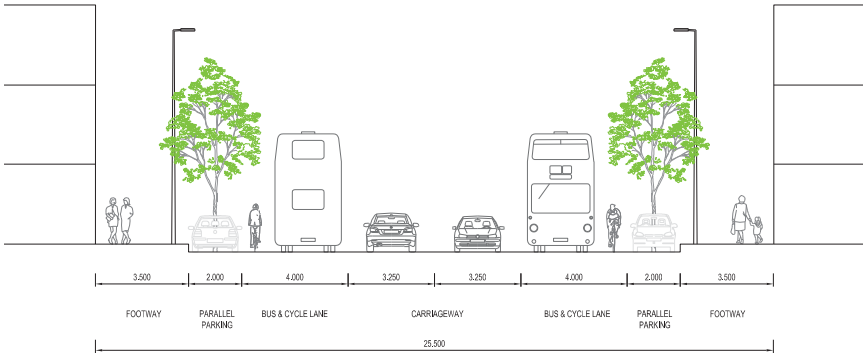
Public transport

A new public transport node at Naas Road / Long Mile Road junction is proposed, combining a new Luas stop with 3 new bus connections. Line C connects directly to the new station on the Kildare Line and the planned new Lucan Luas line. The two other bus lines A and B link from here via Red Cow to Clondakin. Line D and E will cross Naas Road Beech Road connecting national rail via the site to Tallaght and the City Centre. Enhanced public transportation coupled with an excellent slow traffic network will affect a radical change of modal split.

A second Luas stop is a long term possibility at the crossing of Oak Road and the Naas Road. This would improve the possibilities of the development of the first section of the Naas Road. Secondly the Metro West will improve accessibility of the Newlands Green Space area.



Theodor Heuss Strasse Stuttgart DE

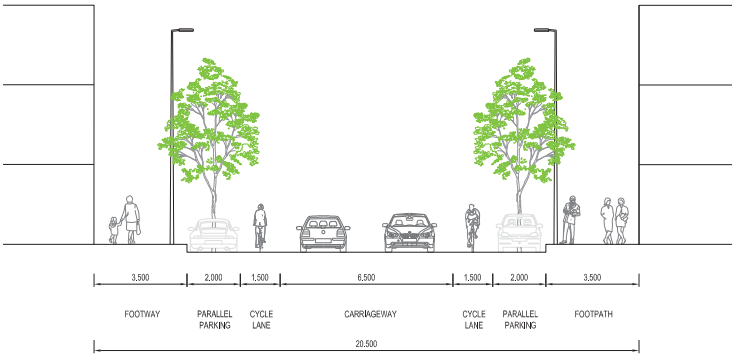


typical primary street

Beethovenstraat Amsterdam NL

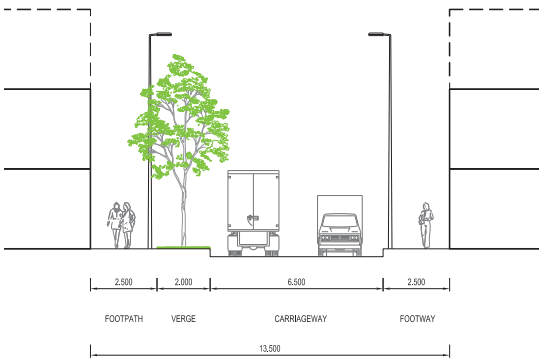
industrial street Genève Acacias CH

industrial street Genève Acacias CH



typical industrial secondary street

industrial street Genève Acacias CH



typical industrial local street

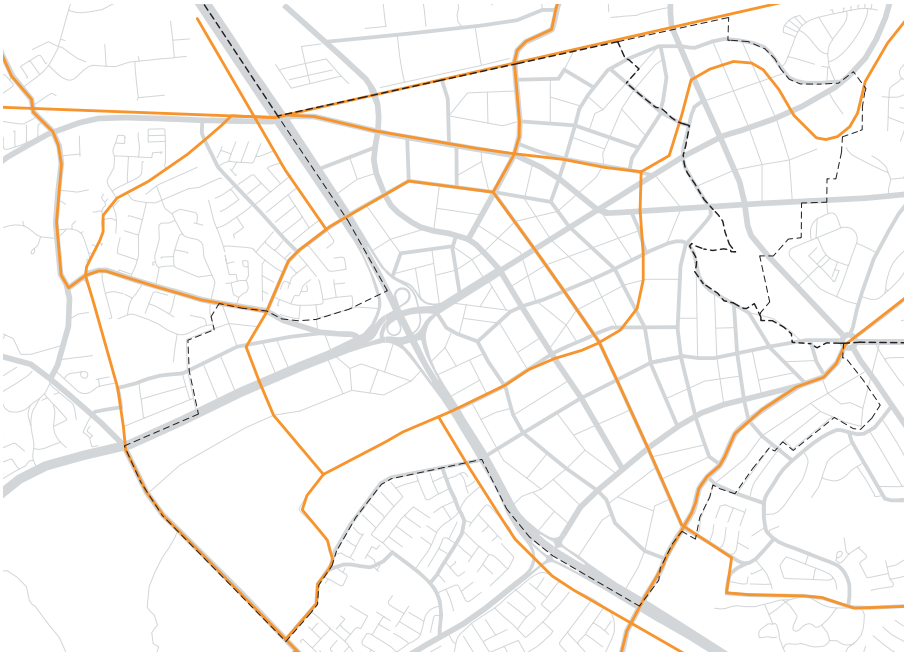
industrial local street Acacias GE CH

Slow traffic network

The slow traffic network establishes cycling routes that link otherwise separated areas within the site. Some routes are piggybacked on existing undervalued features (Grand Canal, Camac, Robinhood Rivers), others join new connections on the primary and secondary network. Two critical connections over the M50 are suggested.

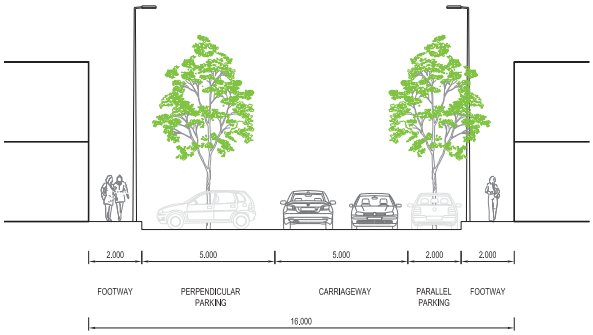
As well as facilitating internal movement this slow traffic network supports wider regional movement: west east from Clondalkin to the city centre along the canal, west east from the open space recreational lands into the strong Walkinstown residential districts, and north south connects existing residential areas to the employment centres north of the Canal.

The position of bicycle paths and laneways in the road profile is based on the hierarchy of the network. On primary roads bicycle paths are seperate from the vehicle lanes. On secondary roads bicycle paths are next to vehicle lanes. On local streets bicycle paths are part of the vehicle lanes and the last possibility is an autonomous path where the bicycle network is independent from car traffic. These positions are shown in the typical street profiles.



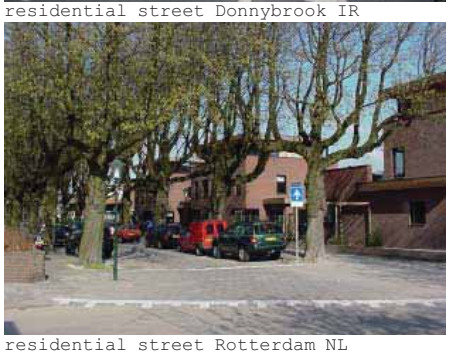
residential street Genève Acacias CH

residential street Rotterdam NL

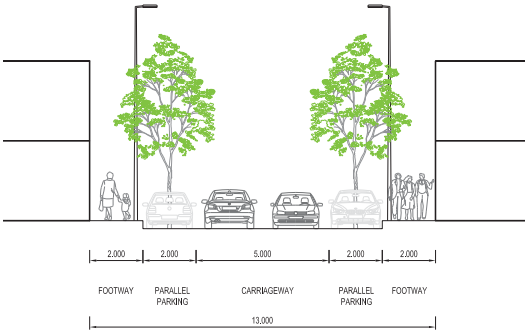


residential local street A

residential street Donnybrook IR

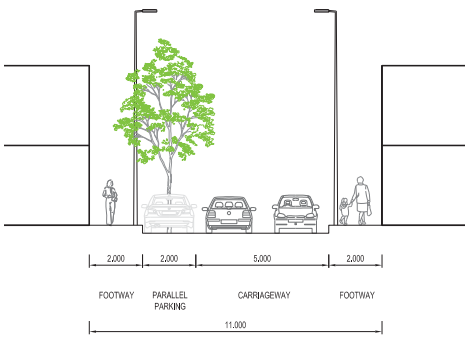


residential street Rotterdam NL



residential local street B

residential street Kaldenkirchen DE



residential local street C

residential street unknown

Naas Road Transformation

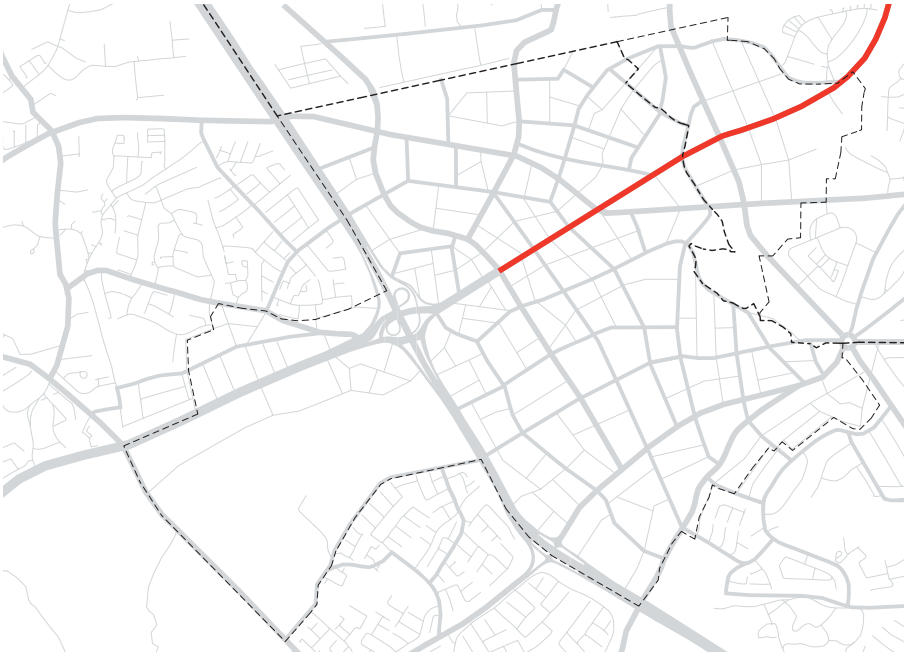
The transformation of the Naas Road into an urban boulevard will result in a significant reduction of traffic congestion and therefore allow a more welcoming urban environment. The actions to achieve this include reducing lanes, introducing cycle lanes, introducing a pedestrian sidewalk, introducing trees, increasing pedestrian crossings to reduce overall speed and transform two existing crossings.

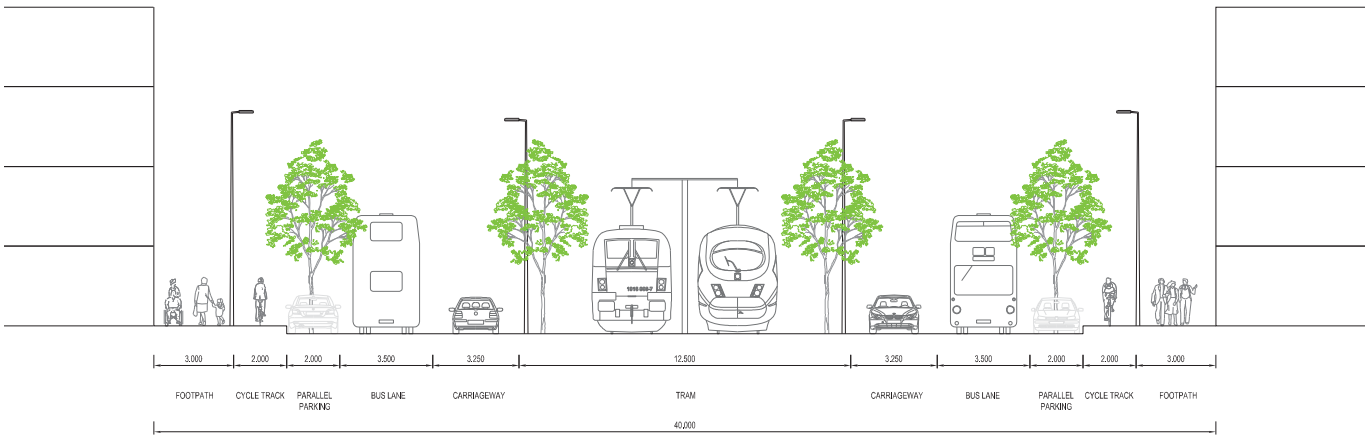
Increasing urban activity along the Naas Road has a precedent in the very successful transformation of Stuttgart's inner city highway ring Theodor-Heuss Strasse into a vibrant urban boulevard attracting an interesting and publicly intensive programme since its transformation.

The positive impact on Stuttgart's inner city flow led to an enormous reduction in traffic congestion

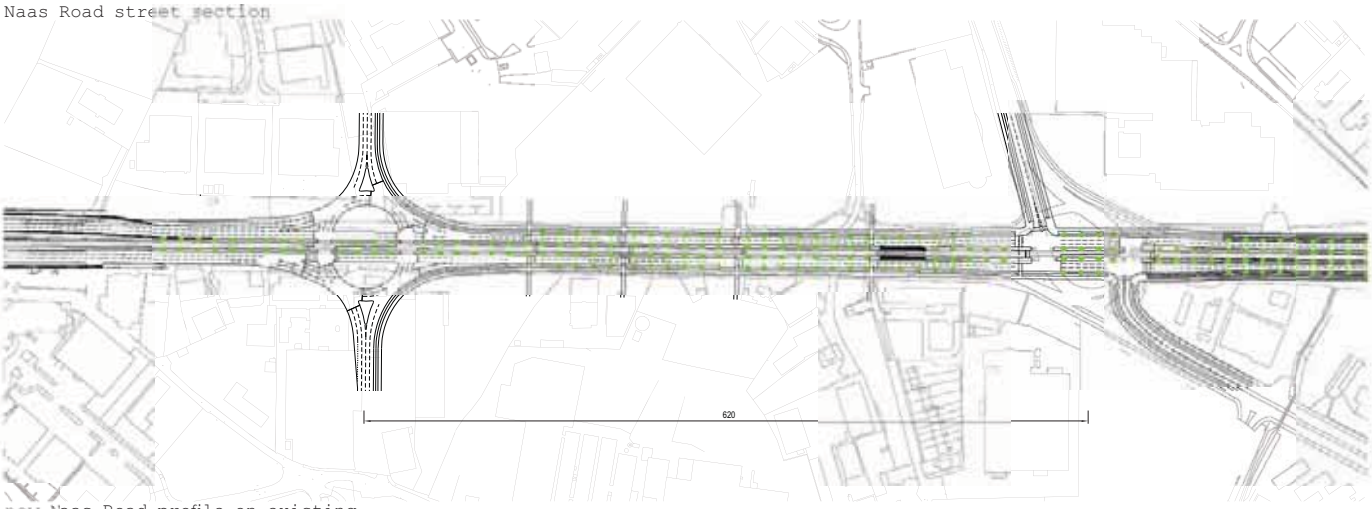
The Naas Road has the potential to transform step by step into an attractive gateway to the city centre of Dublin accompanied by interesting commercial, retail and leisure uses.

The details of this transformation and its relationship to the surrounding traffic situation can be found in the Transport & Traffic study that accompanies this Development Framework.

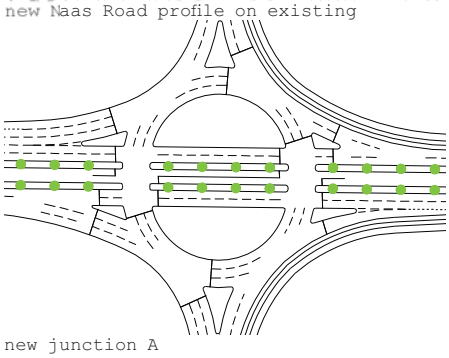




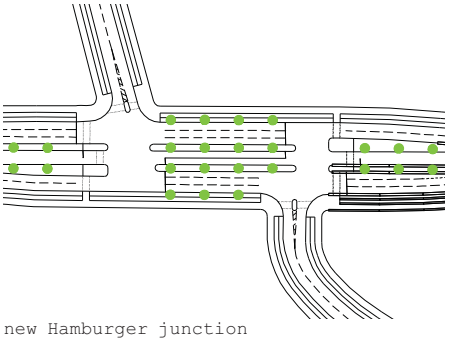
Naas Road street section



new Naas Road profile on existing

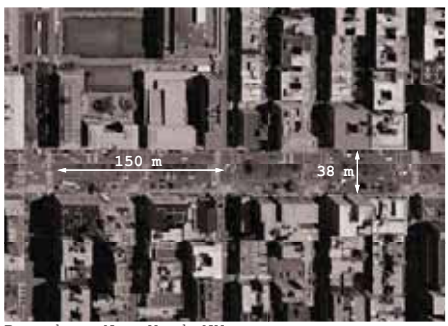


new junction A

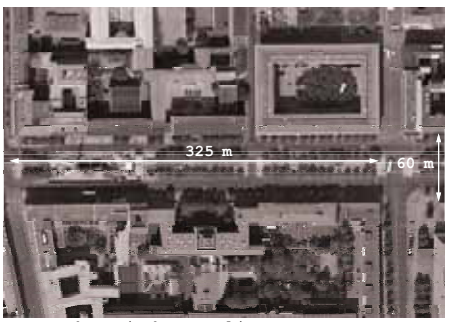


new Hamburger junction

O'Connel Street Dublin IR



Broadway New York NY



Unter den Linden Berlin DE

roads to complete primary network

roads to complete secondary network

slow traffic connection

Overlay network on existing