

DENSITY

Density and accessibility to public transport are fundamentally interconnected. This connection is the basis for a sustainable approach to urban planning.

The determination of an average floor area ratio follows from; the comparative analysis with other marginal locations, an assessment of likely regional demand, the relative importance of the area, and an understanding of future infrastructural capacities.

A floor area ratio of 2.0 is considered as an appropriate maximum density in this area with this higher figure applied locally at key locations within the M50 ring coinciding with public transport nodes.

Overall the density will increase because current uses and related densities are not matching the area's potential. This applies more to areas directly at the Naas Road then areas close to the perimeters that have a gradual increase from existing density.

At this stage of the Development Framework building height is not being indicated, although implicitly it is there, as the result of plot ratio per site.

Building height together with potential typologies should be the subject of Masterplans for each character area.

The Development Framework uses 'Floor Area Ratio' (FAR) to express density. This definition is similar to Plot Ratio.

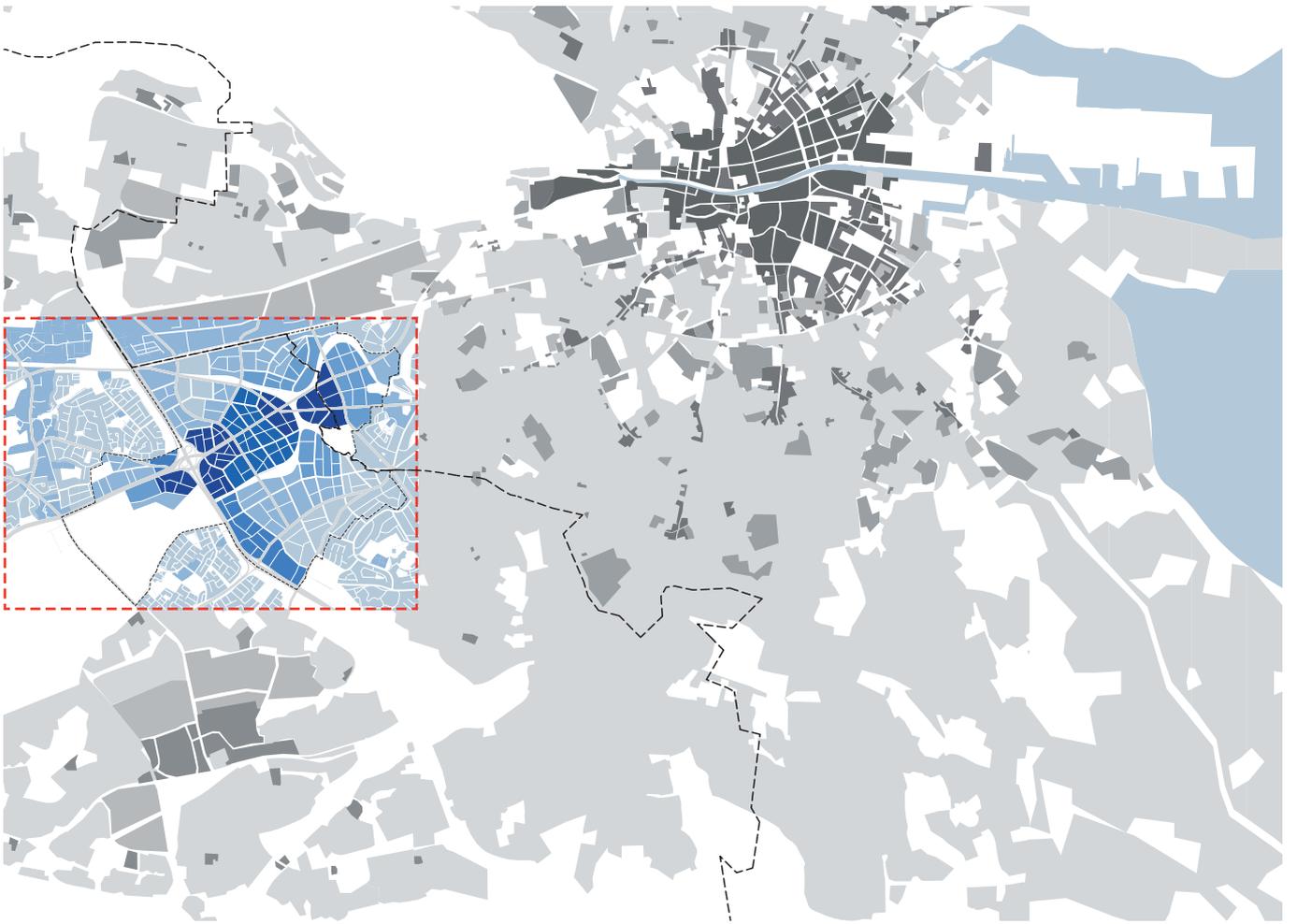
Density and accessibility to



Hafen City Hamburg DE



Zuid As Amsterdam NL



o public transport are fundamentally interconnected.



Naas Road Development Framework



London Legacy London UK



Plot ratio

The average floor area ratio indicates potential future density. This number is directly related to the accessibility level as was defined in the transport & traffic study.

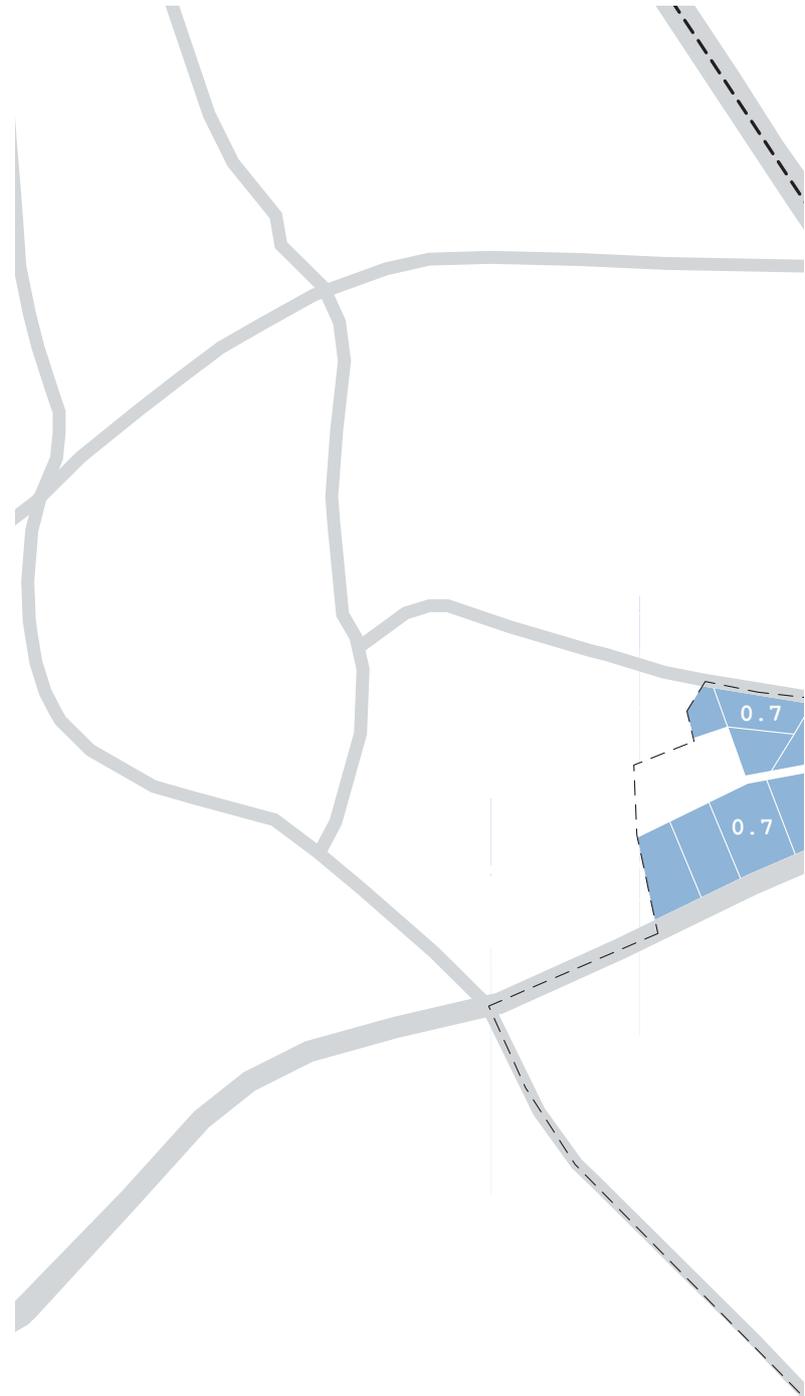
This principle of accessibility was amended in respect of the residential areas at the Canal and adjacent to Walkinstown - excessively low densities would continue undesirable suburban types of development. Because proposed densities do not exceed the existing, it is assumed additional trips are not being generated.

Two locations at the inside of the M50 at the Naas Road are defined as having a density of 2.0. The new centre area 'Rivers Crossing' that is in proximity to Dublin City Council's planned Prime Urban Centre and the area close to the Red Cow because of its visibility and accessibility level.

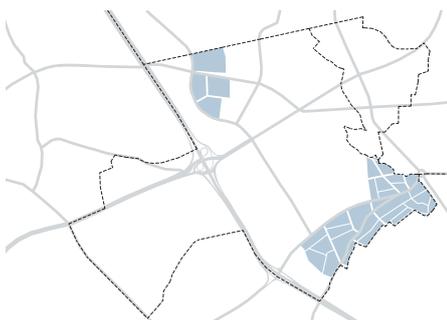
North West of The Red Cow an optimisation of existing uses is proposed.

South west of the Red Cow a high density is possible in proximity to the Red Cow because of the accessibility to public transport.

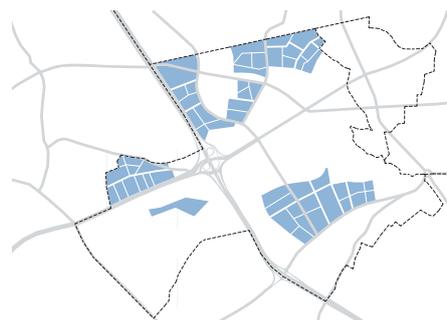
Further along the N7 densities are being gradually restricted because of the limited accessibility and the positioning in the Green Belt that allows public oriented uses. Over the long term Metro West will improve access from Belgard Road.



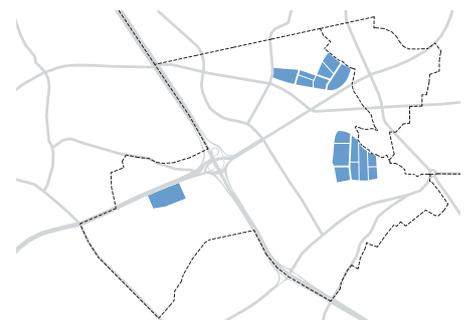
Gradual range of densities



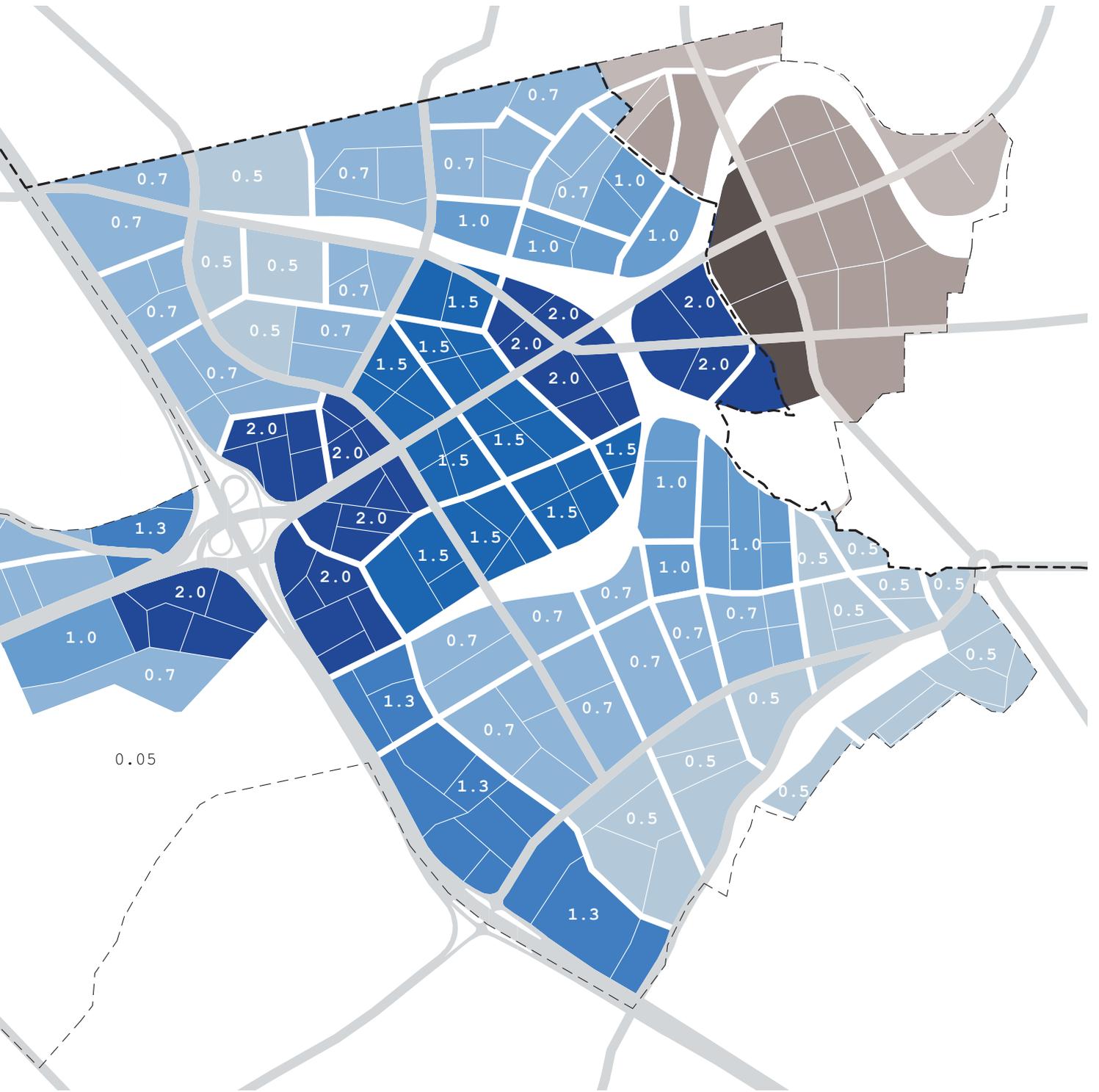
0.5
78



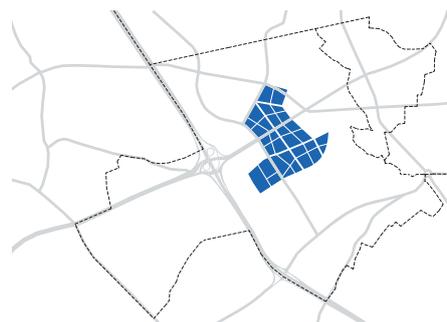
0.7



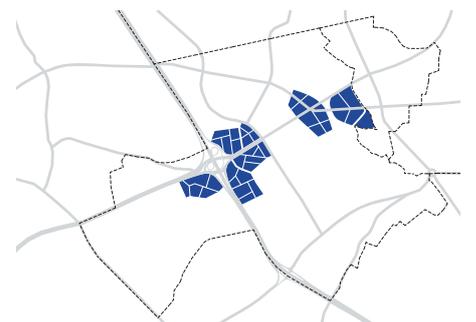
1.0



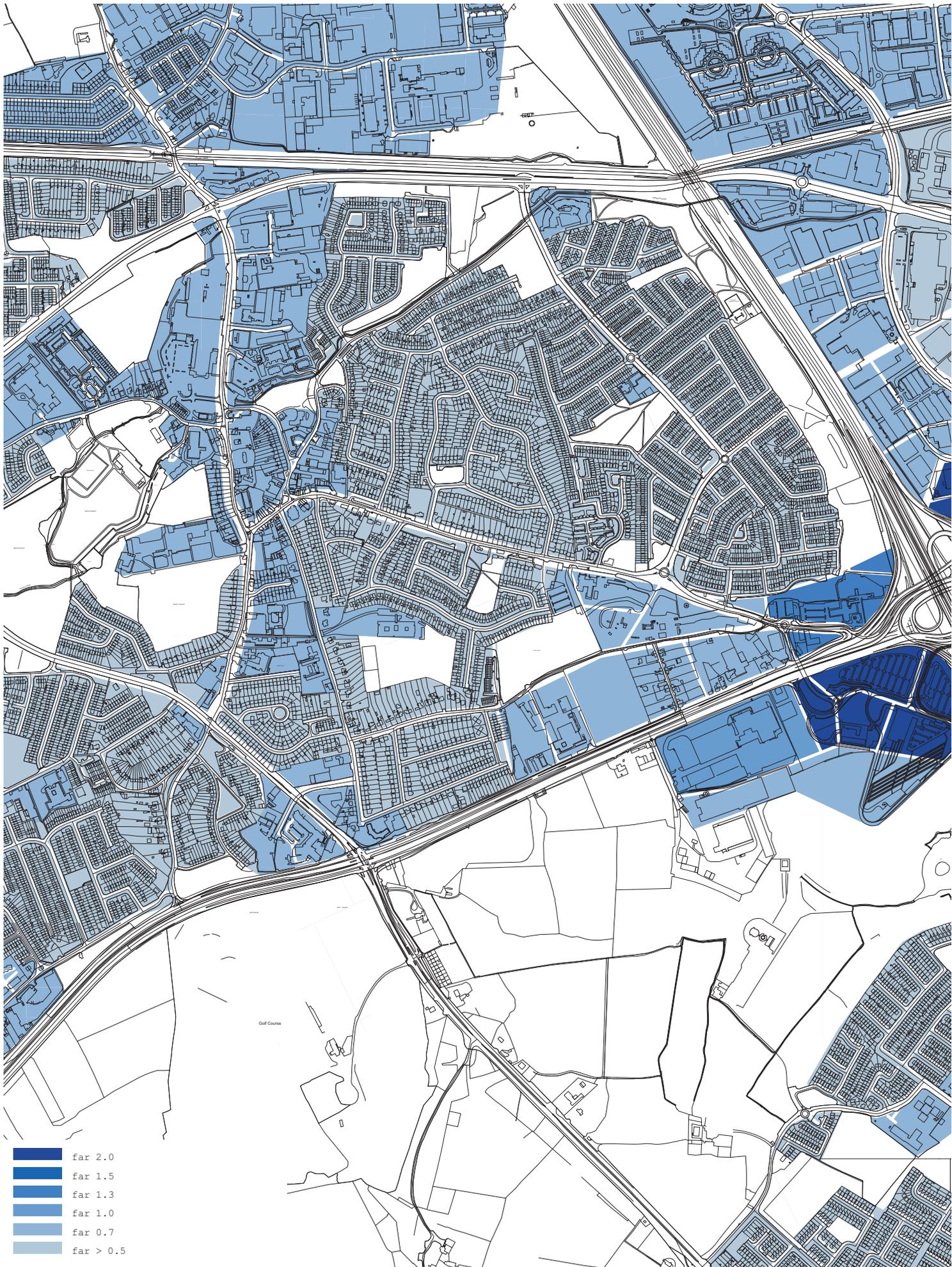
1.3
Naas Road Development Framework



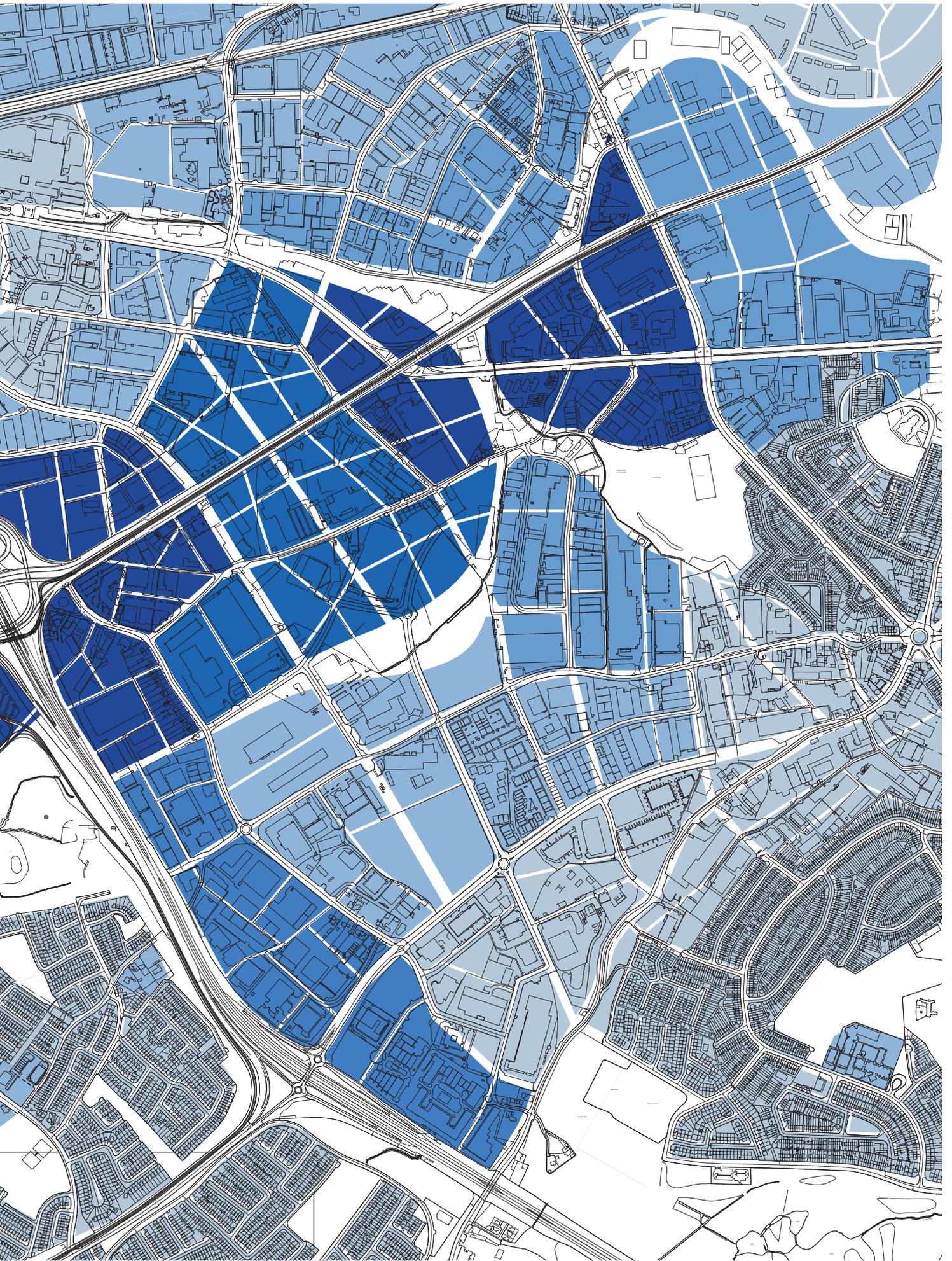
1.5



2.0



Overlay density on existing



CHARACTER AREAS

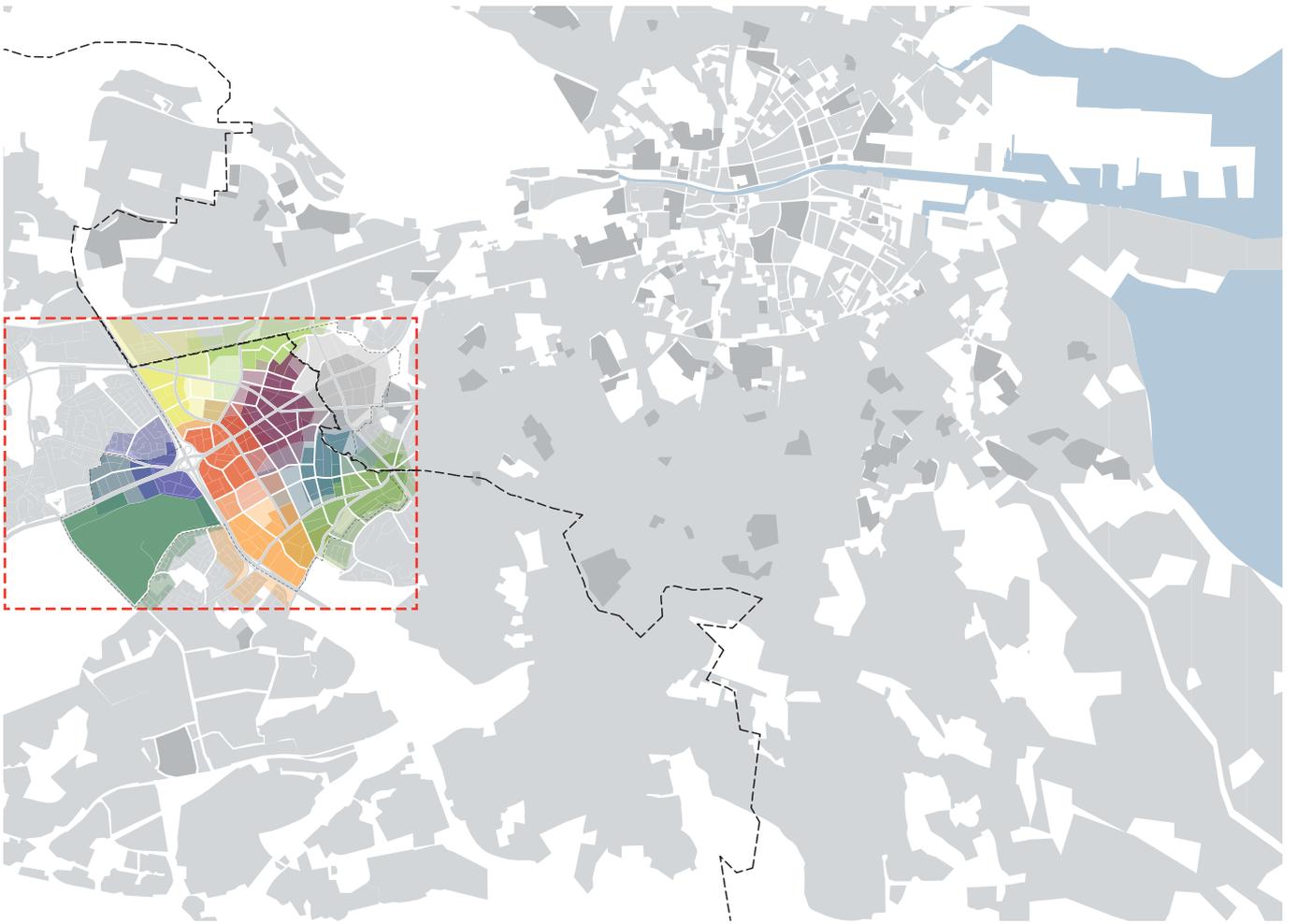
Place making is a key outcome of successful planning - it is predicated on the individual characterisation of locations.

This Framework can only deal with the identification of the character areas and the main aspects defining them.

Each area could be the subject of a masterplan in which general character and potential, traffic and transport, implementation strategies for network and open space, landownership, phasing, development quantum, building height and typologies are examined in much greater detail.

Placemaking is a key outcome of succ





Successful planning - it is predicated on the individual characterisation of locations.



Definition

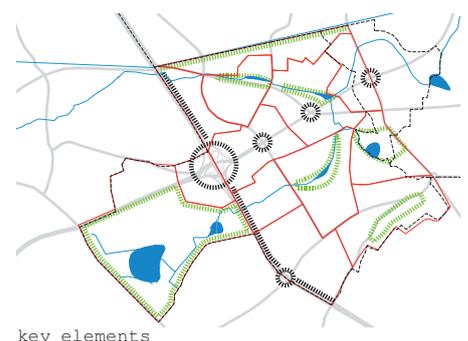
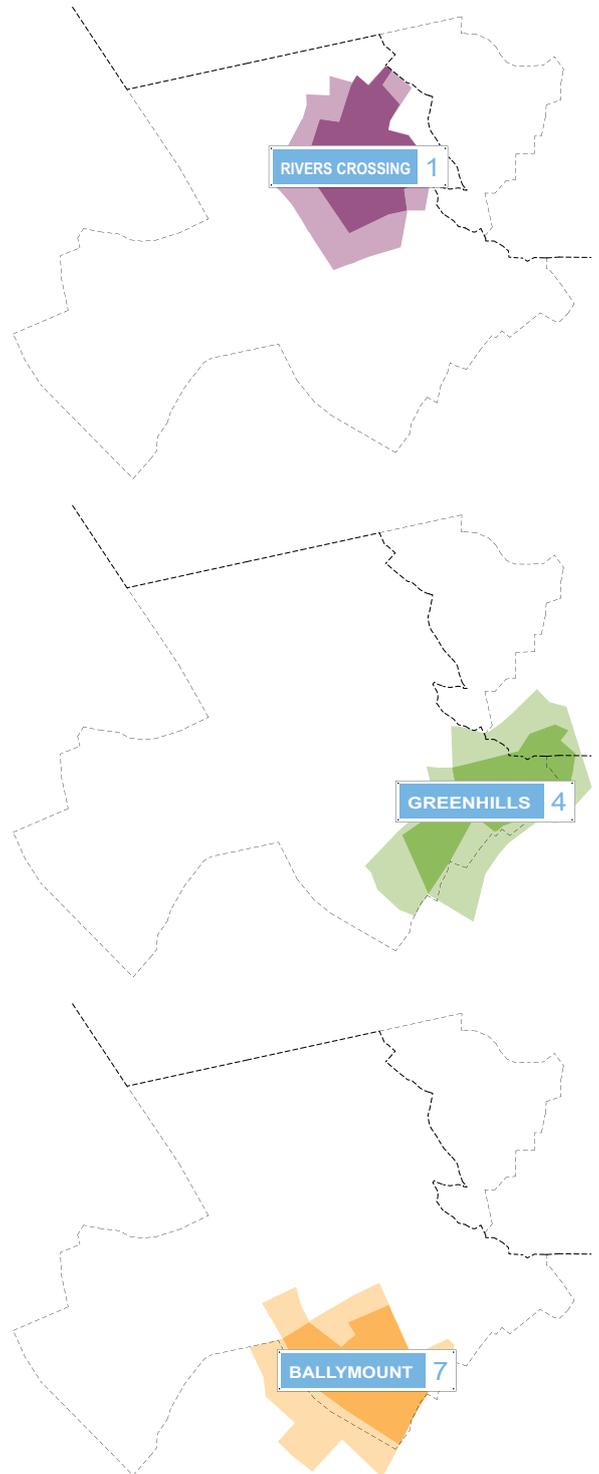
The character areas are defined through an overlay of various criteria such as available assets, key urban or landscape elements, zoning and density. These criteria generated areas as proposed are built on the existent assets of the individual locations.

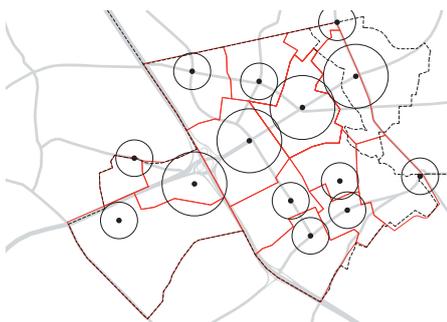
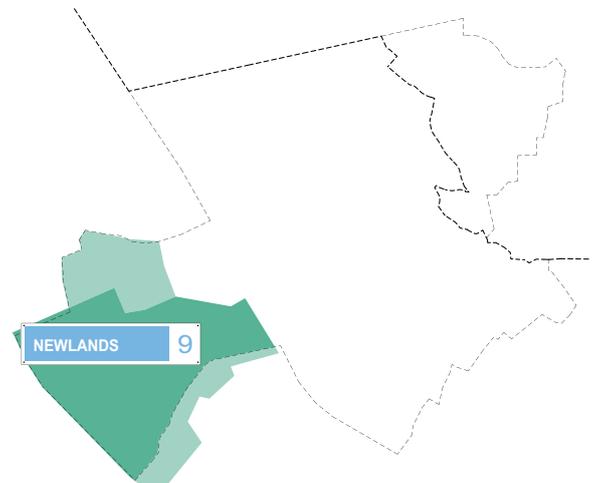
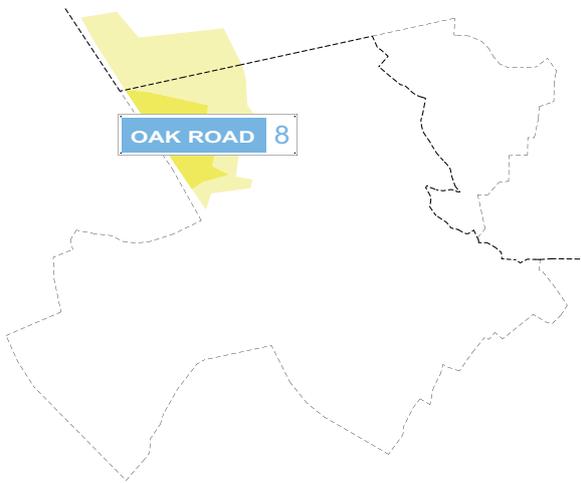
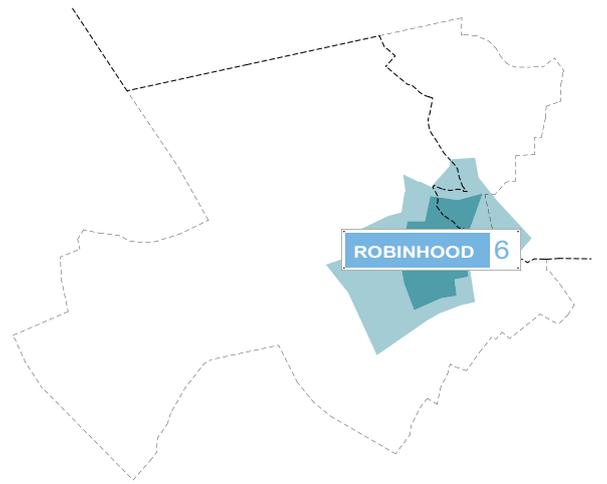
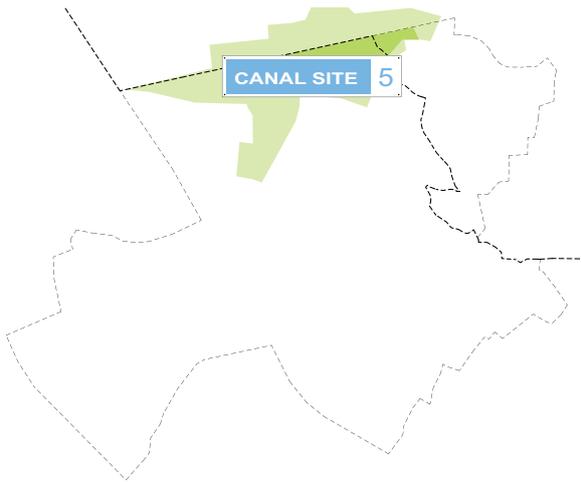
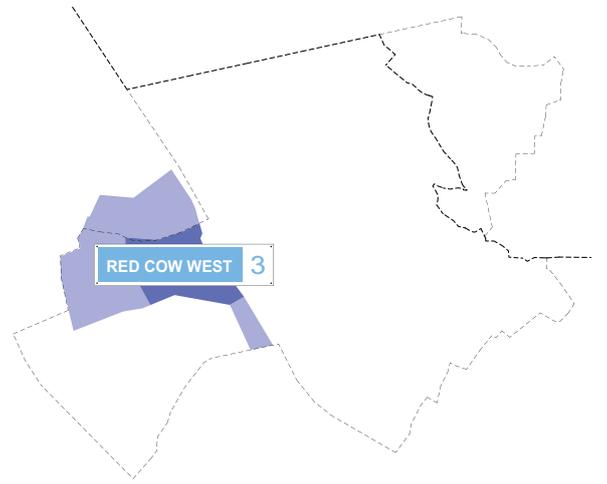
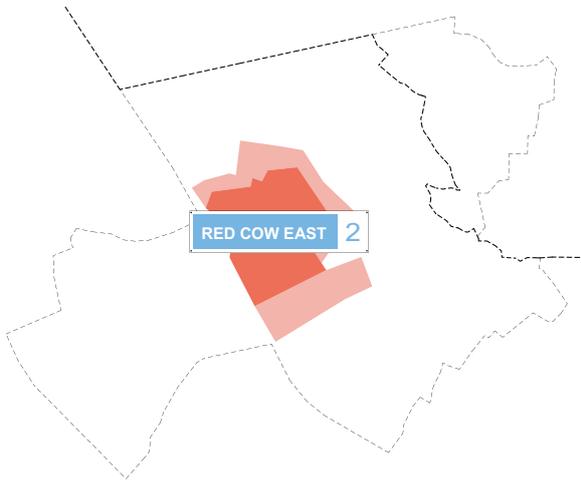
Nine areas result - each with a distinctive core character and a graduated interface with its neighbouring areas.

These zones were given the following names; Rivers Crossing, Red Cow East, Red Cow West, Greenhills, Canal Site, Robinhood, Ballymount, Oak Road and Newlands.

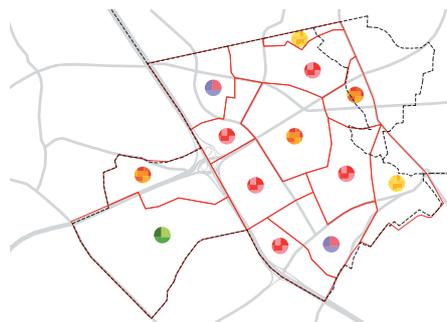
The character area Rivers Crossing has been identified as having the strongest potential for transformation and as the central area in the Naas Road framework perimeter has the highest priority to be developed. The crossing of the Naas Road, transformed into an urban boulevard, with the linear park in combination with the proximity to Dublin City Council's prime urban centre, sets a powerful condition for transformation.

Second comes the areas Canal Side and Greenhills located at the edges of the study area. Currently these areas show the strongest conflicts between uses and therefore are most in need of urgent amelioration. Other character areas identified can transform gradually or continue as mainly industrial.

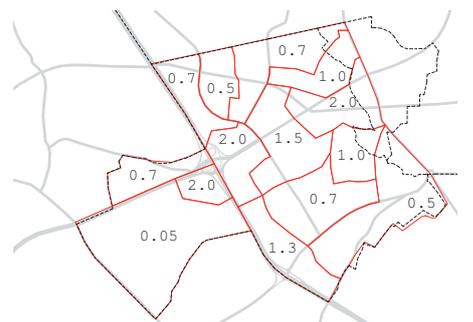




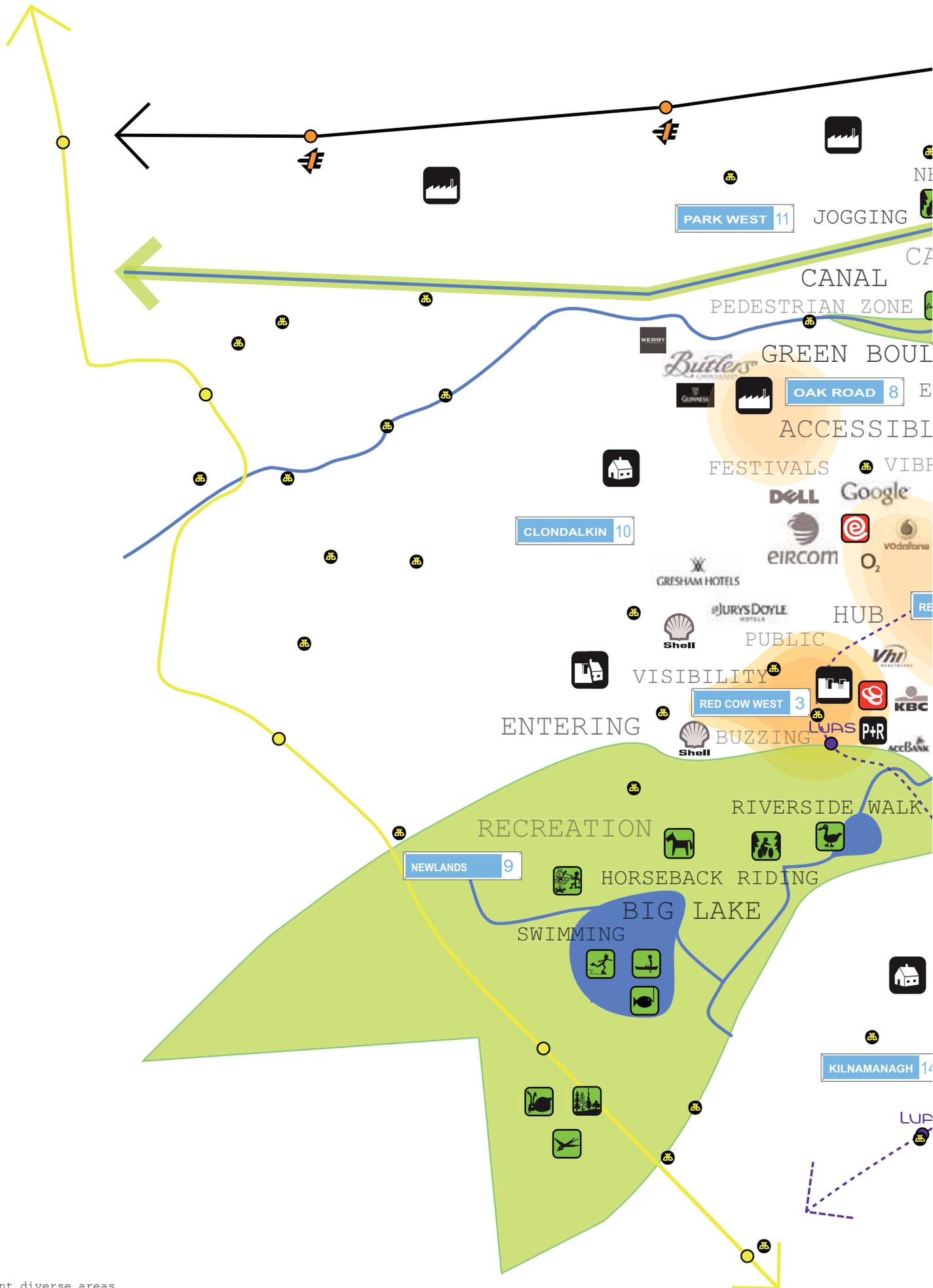
public transport
Naas Road Development Framework

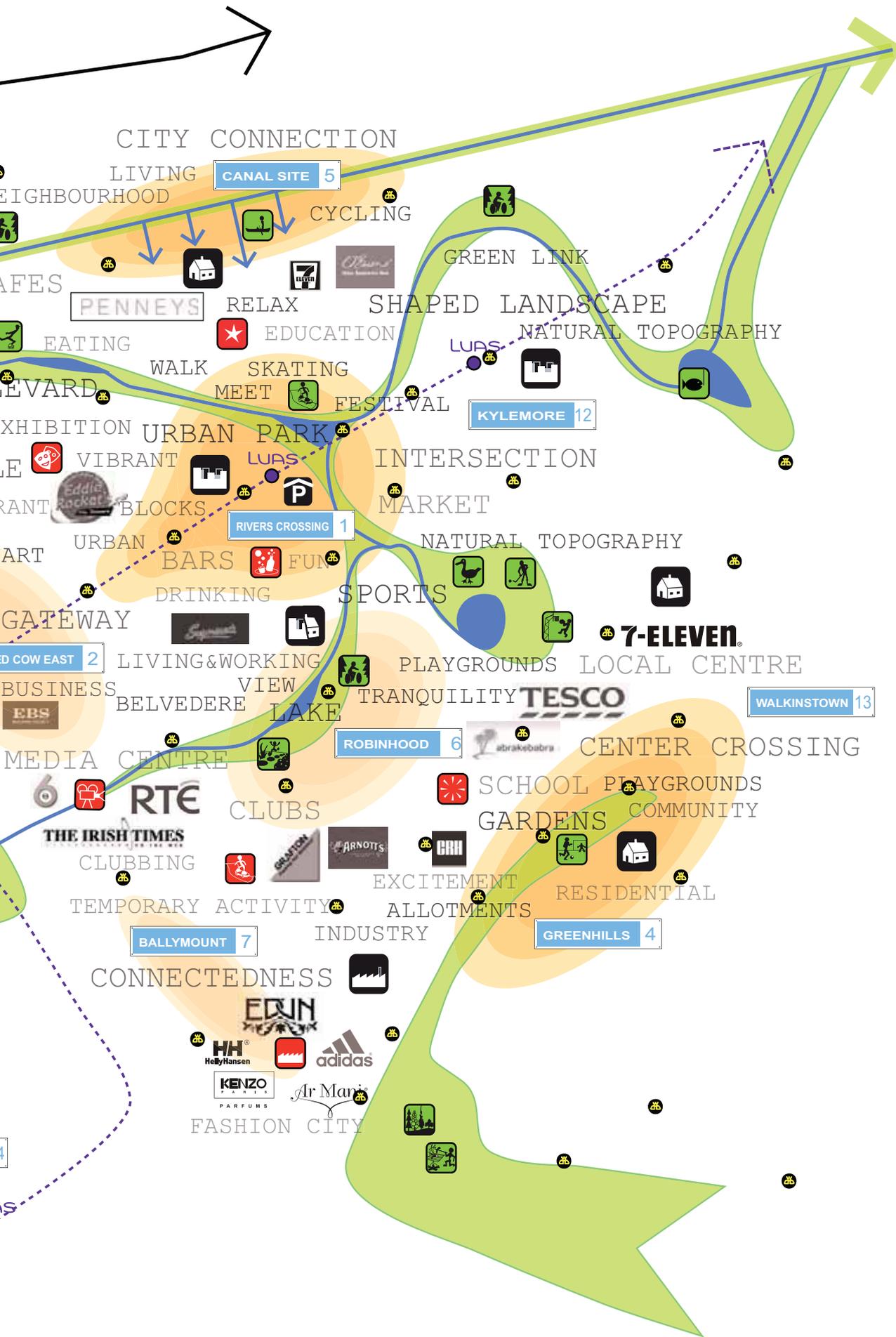


zoning



floor area ratio





TRANSFORMATION

This study addresses a shorter-term need to identify worthy and achievable goals for the area in the context of the existing infrastructural realities and the Development Plan cycle. That reality is based on the acceptance that the national primary highway system is at or near capacity and that additional development can only happen if there is a paradigm shift in respect of the nature of any such future development. That shift requires a truly sustainable development framework to release capacity.

East of the M50 the proposition is that development is achievable providing the following are put in place:

- Structural changes to the movement network so to establish a level of connectedness throughout the study area and to the surrounding districts.
- Improvements in public transport - specifically additional Luas stops and bus routes.

- Mixed use development avoiding single use zoning and the creation of walkable neighbourhoods
- A radical alteration in the perception of the area.

West of the M50 capacity is also constrained and the propositions either side of the N7 differ. North of the N7 the assumption is that the existing slip lane access arrangements continue and the anomalous undeveloped land space is now marked for limited development but with density severely prescribed given the national primary highway capacity issues. Consideration was given to what key elements of infrastructure might alter this equation - none appeared to produce a viable balance between coherent planning, expenditure, released values, and the highway capacity issues.

South of N7 priority is given to the preservation of the Green Belt. The lands that are in close proximity to the Red Cow have sufficient accessibility to accommodate

a development consistent with their visibility from the M50. Further along the N7 it is proposed to facilitate a limited amount of development on sites already zoned for industrial uses.

Here the proposal is to rationalise the anomalous interface of built and open space zonings and allow limited development on those currently zoned lands along on the N7, accessed from the Monastery Road interchange but conditional on the removal of the existing left in left out arrangements on the N7. The lands along the N7, in the direction of Newlands Cross, are part of a green zoning which implies that a low density is allowed for uses that have a public character and do not generate significant vehicular movements.

The development framework i



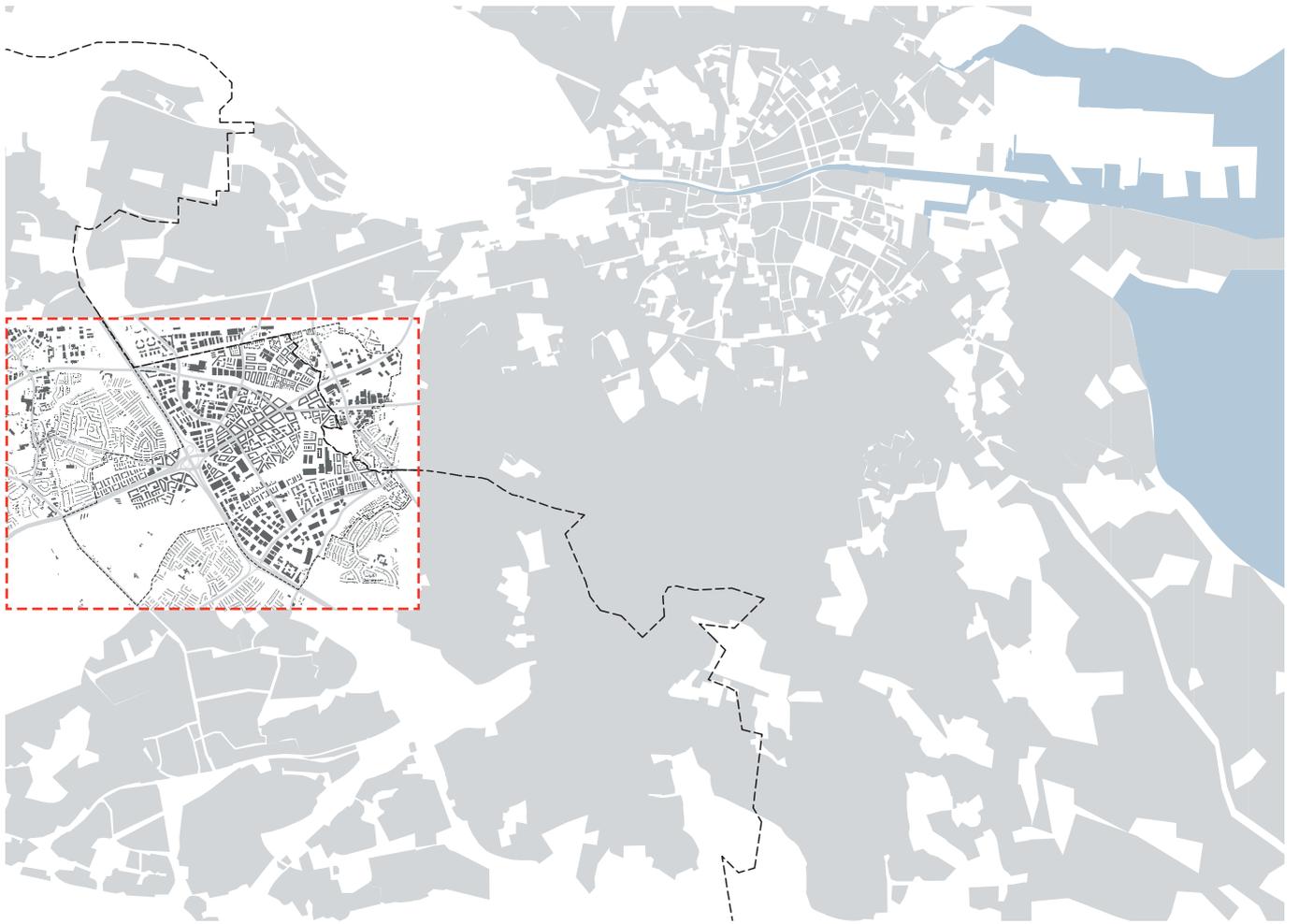
start phase one



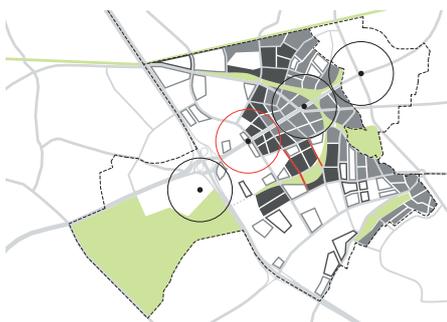
halfway phase one



2016 end phase one



s not prescriptive but there are critical sequences.



2022



2028



and beyond

Phasing 2010-2016

Phasing for a development of this extent and timeframe and in a context that is mainly market driven cannot be fixed. The scheme represented here should therefore be understood as a scenario, showing an order that is closest to the logic of the development framework.

For the first phase 2010-2016 initial development is encouraged at the Naas Road Luas hub in proximity to Dublin City Council prime urban centre. Secondly the edge areas towards the Canal and towards Walkinstown should be developed. These three areas will see the most radical change of character and development should therefore be managed in a more controlled process. The parallel development of infrastructure and open space and therefore the interaction between public and private parties is crucial to the success of this transformation.

The industrial areas and industry led areas can have a more loose type of development, closer to the current zoning regime, as they are more to do with optimisation and future compatibility than about radical change.



start phase one



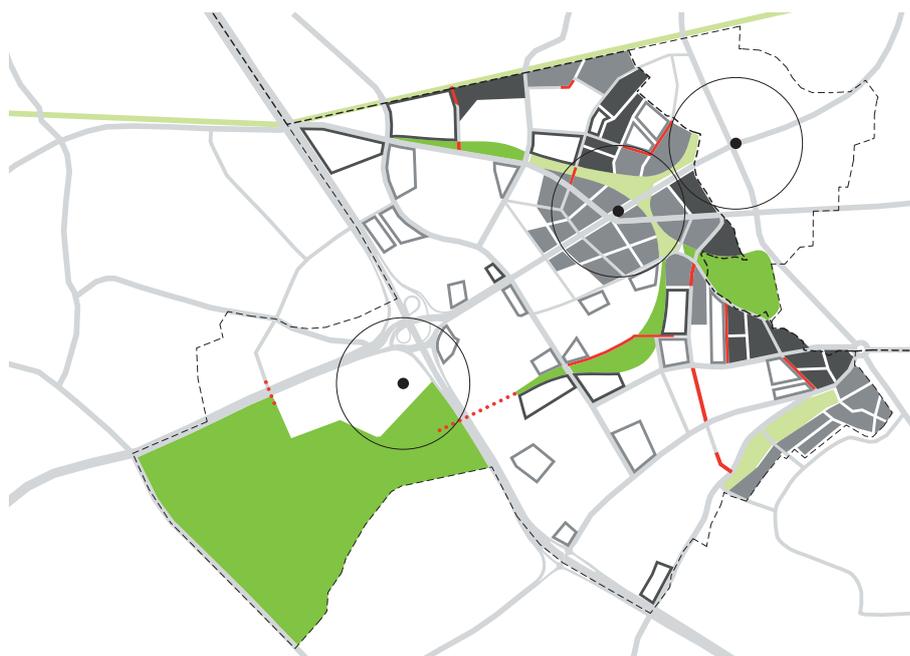
halfway phase one

- roads
- new roads
- green
- new green
- developed
- newly developed
- transformed
- newly transformed

legend

Although precise planning cannot be fixed, there are critical sequences to be incorporated. Phase one should start with the Naas Road's profile change and with the transformation of the two crossings on it. These actions are crucial for both changes to the identity of the area and for improving mobility. Secondly some key linkages to the primary network should be put in place.

Public amenity space, the delivery of the further key linkages and an ongoing rolling out of environmental improvements to street profiles should happen in a in parallel process of development.



2016 end phase one

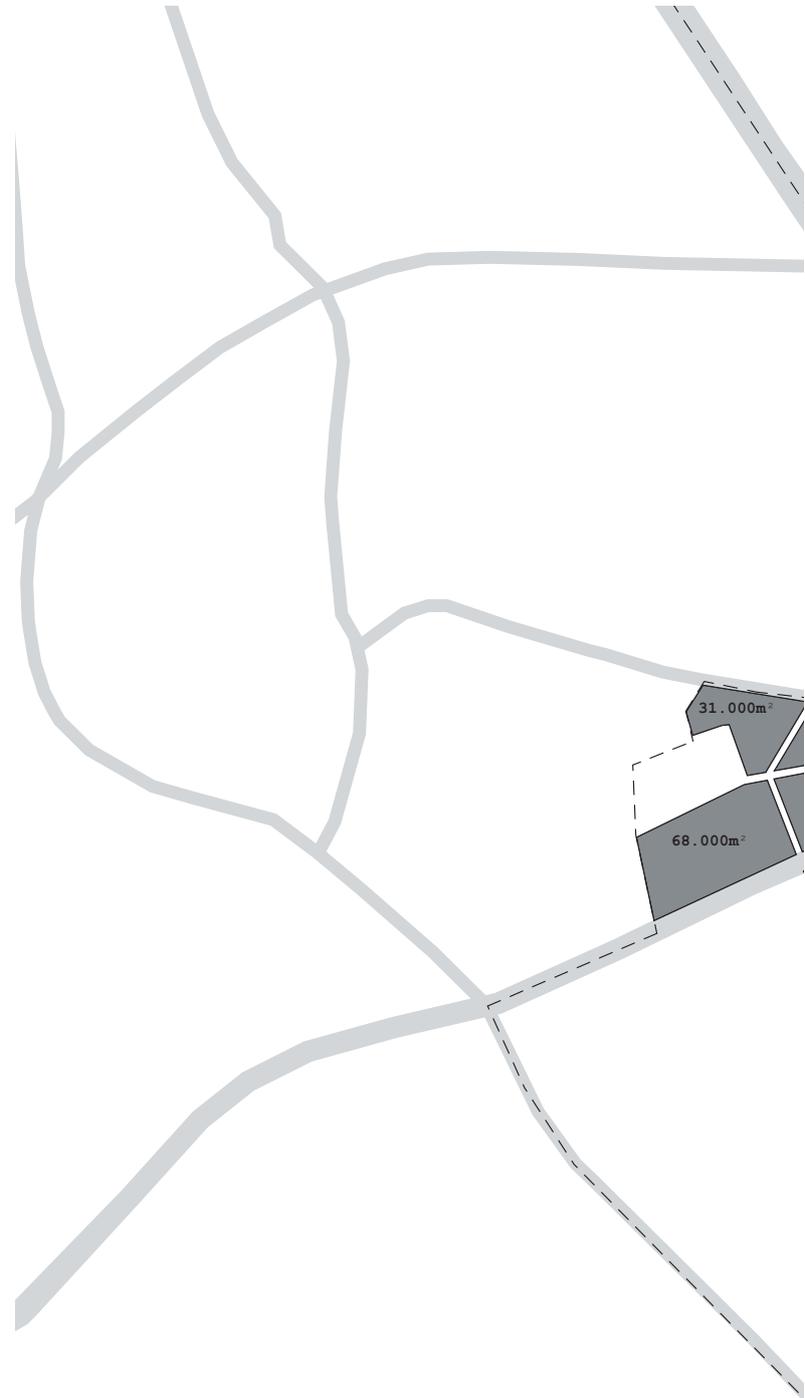
Plot transformation

The primary network defines big plots with dimensions suitable for industrial/warehousing uses, based as it is on today's layout. Any change of use requires a downscaling of these plot sizes.

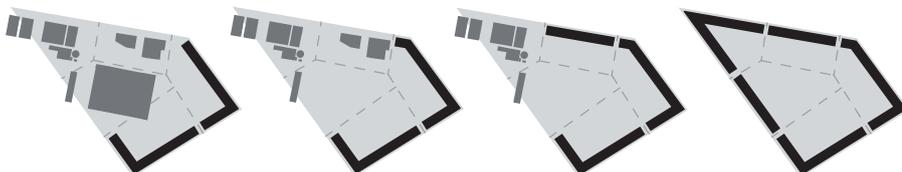
A fine grain of plots allows more easily for permeability. It generates slow traffic movement and ground floor activation, all important for the quality of urban environment.

Appropriate plot sizes, that relate to use and typology, were defined for each mixed use area in the form of 'plot transformation rules'. Different ways of how to incorporate existing property and built form include:

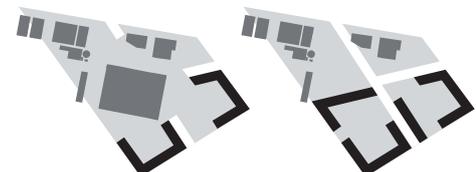
1. No downscaling of plot. Permeability is achieved through privately owned access paths.
2. Downscaling plots by the introduction of streets on regular layout. This does not respect ownership lines but creates overall continuity in the small scale network
3. Downscaling plots by the introduction of streets that follow property lines to a maximum. The integration of buildings is more easy but as a result the small scale network is more irregular.



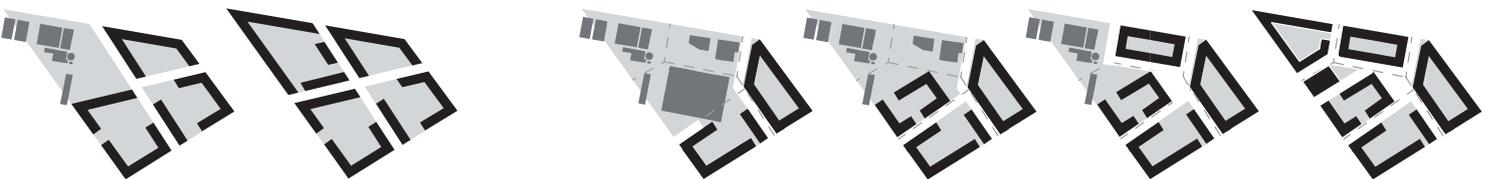
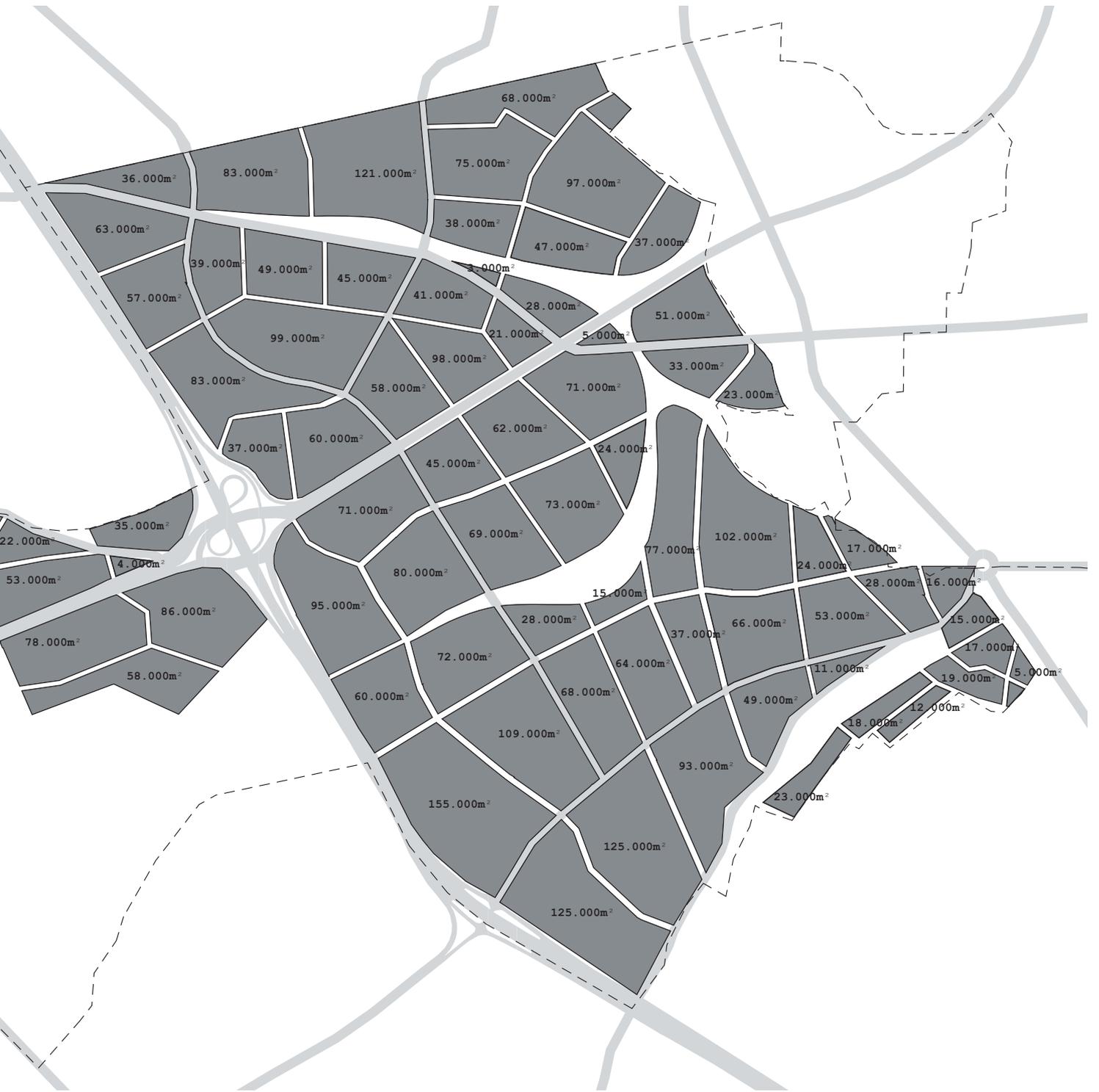
plots generated by main network



no subdivision of a block



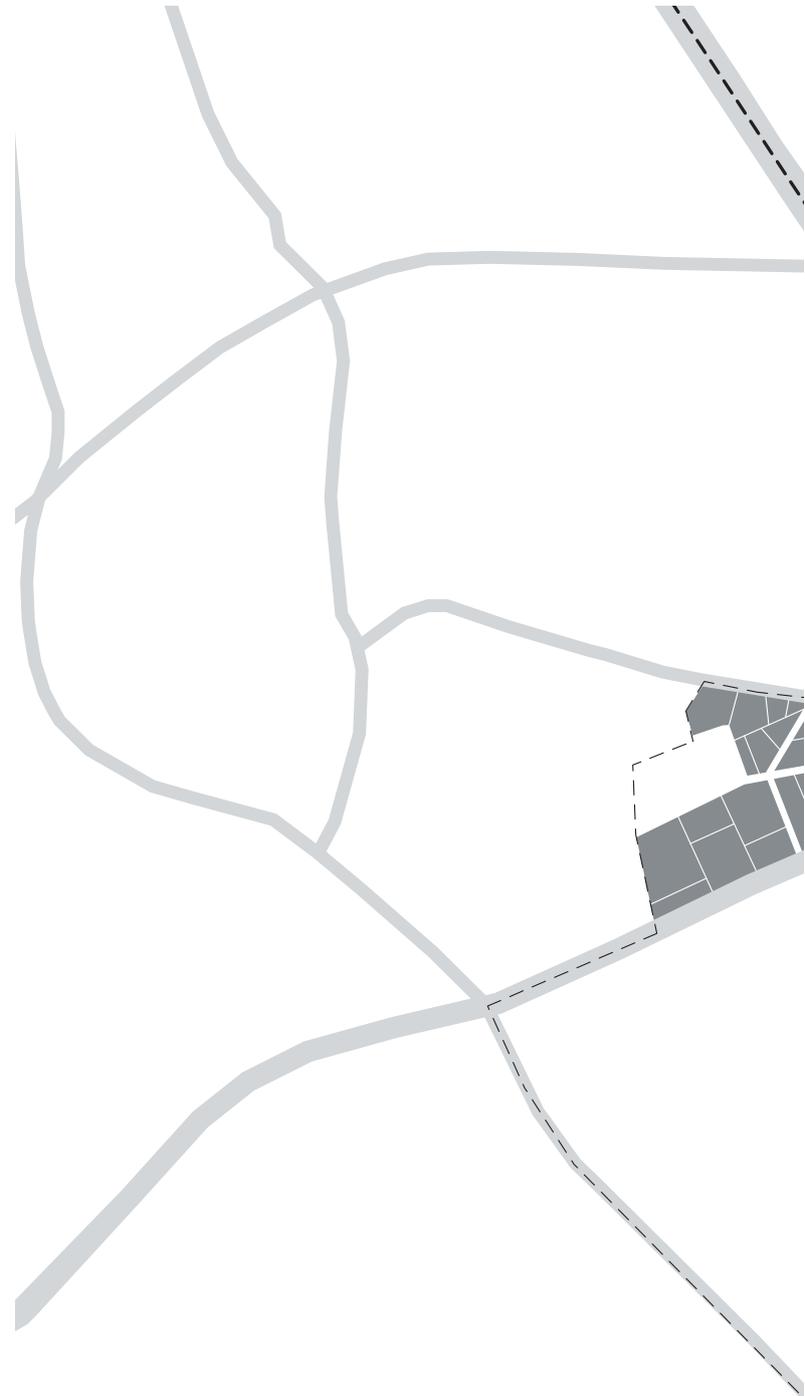
subdivision through regular streets



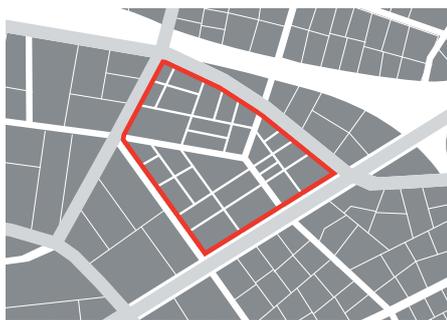
subdivision through regular streets adapting property lines

Shown here is an example of downscaling the plots using the plot transformation rules. It was carried out for the whole study area using the same geometric rules but with different scales in anticipation of future uses.

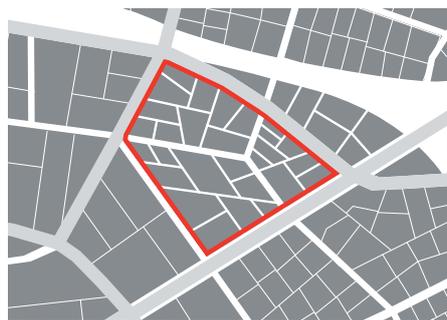
For two areas it is shown how plot division can be done with varying geometries accommodating to a varying degree the existing property lines and built form.



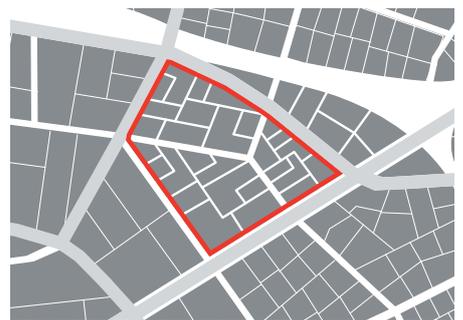
possibility for plot division based on transformation rules



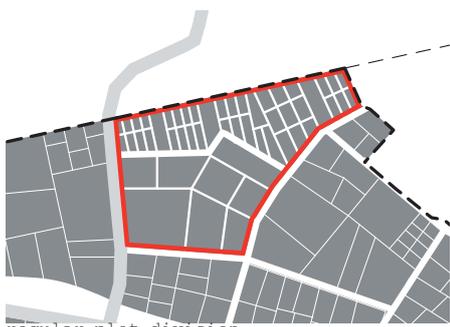
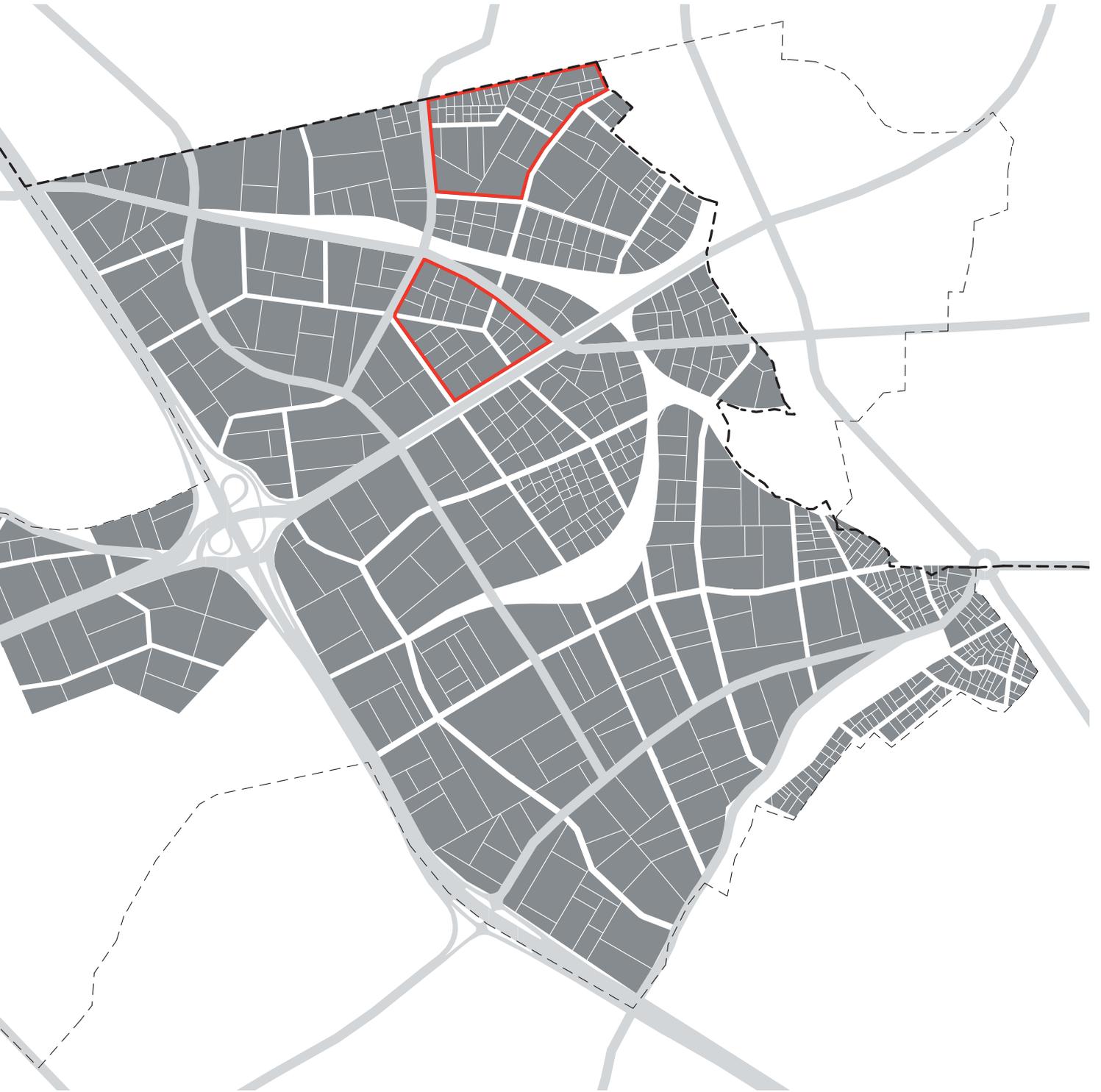
regular plot division



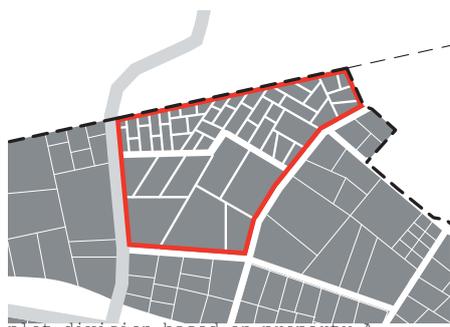
plot division based on property A



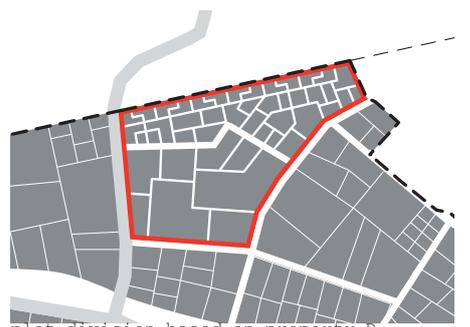
plot division based on property B



regular plot division



plot division based on property A



plot division based on property B

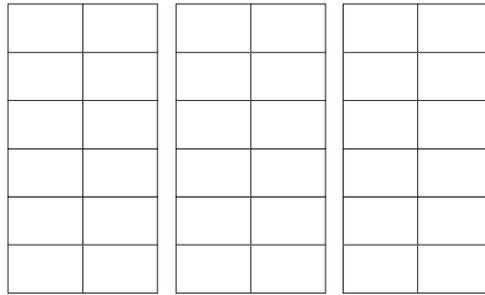
Plot transformation rules

Residential A

Size: 400m² - 1,000m²

Proportion: 3:1

all plots access to street
right angles and very regular

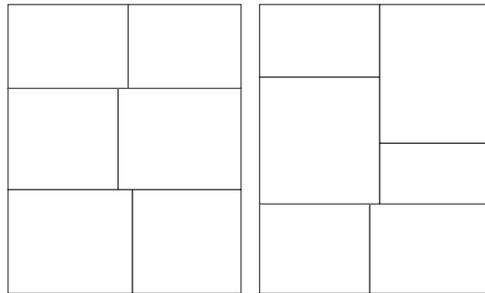


Residential B

Size: 2,000m² - 5,000m²

Proportion: 2:1

all plots access to street
angles follow development
(can be irregular)

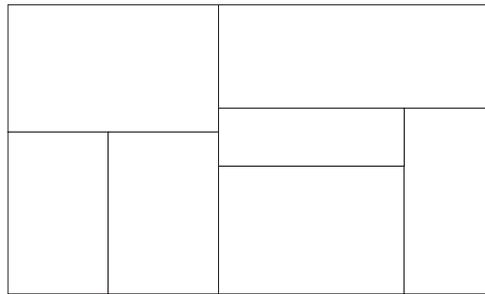


Mixed use (non industrial)

Size: 3,500m² - 7,500m²

Proportion: 4:1

internal fields might happen
(internal access must be possible, differentiation of public & semipublic on each plot)
angles follow development
(can be irregular)

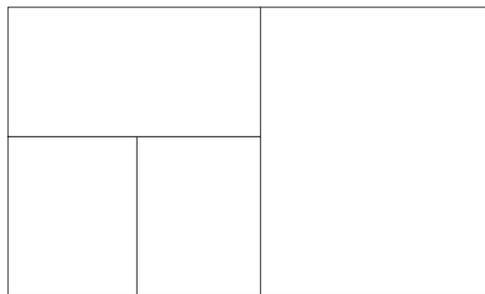


Mixed use (with industry)

Size: 5,000m² - 20,000m²

Proportion: 2:1

internal fields might happen
angles follow development
(can be irregular)

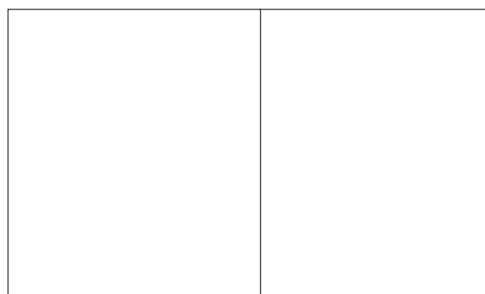


Industrial

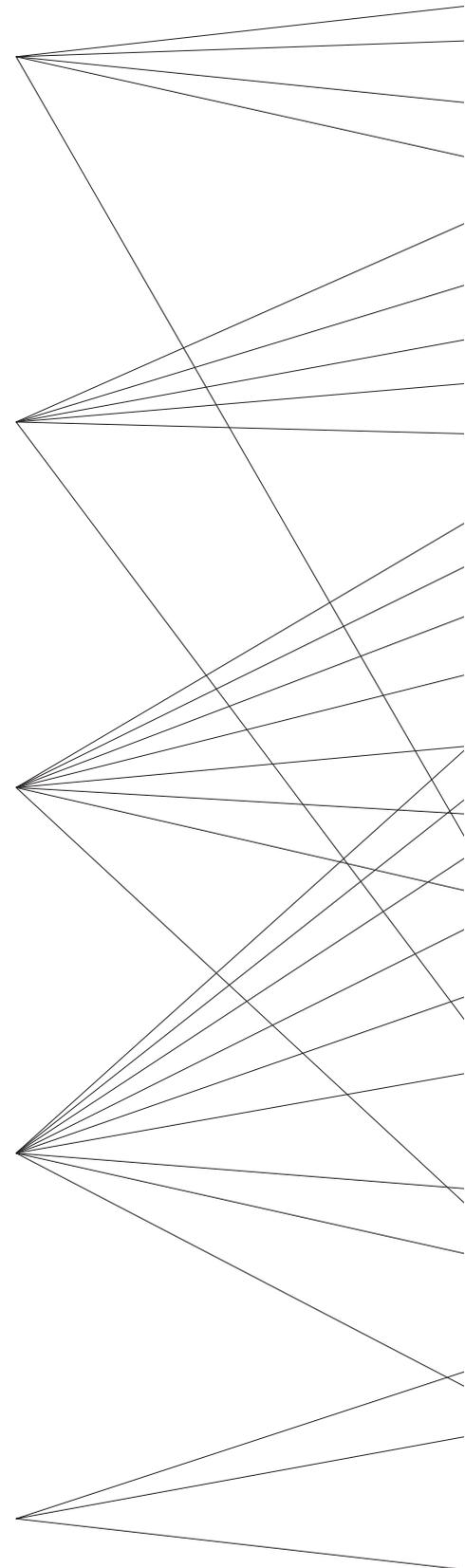
Size: 15,000m² - 50,000m²

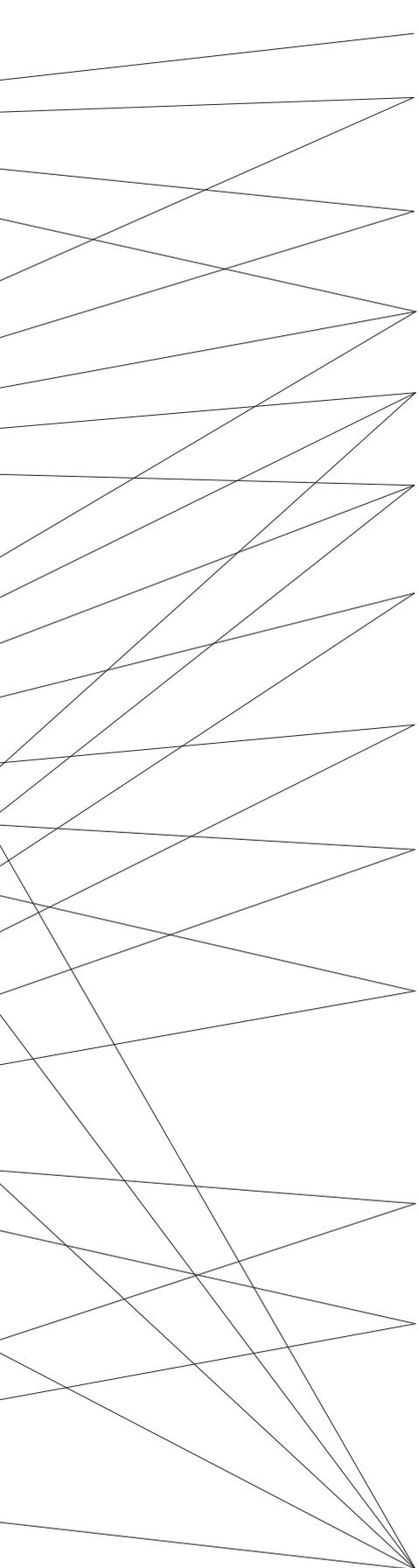
Proportion: 2:1

internal fields might happen
angles follow development
(can be irregular)



Basic Plots





Suburban



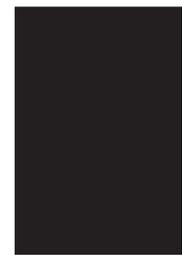
Front-defining



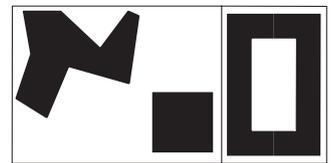
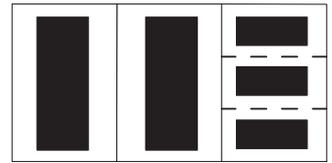
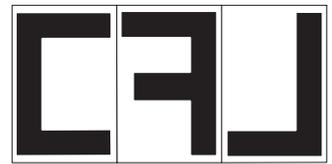
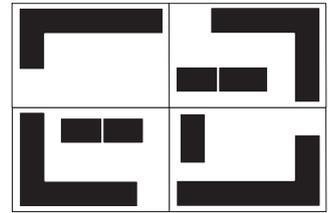
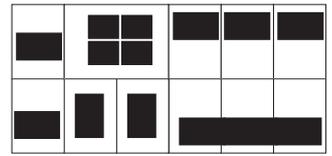
Space-defining



Stand-alones



Basic Typologies



Variations & Combinations