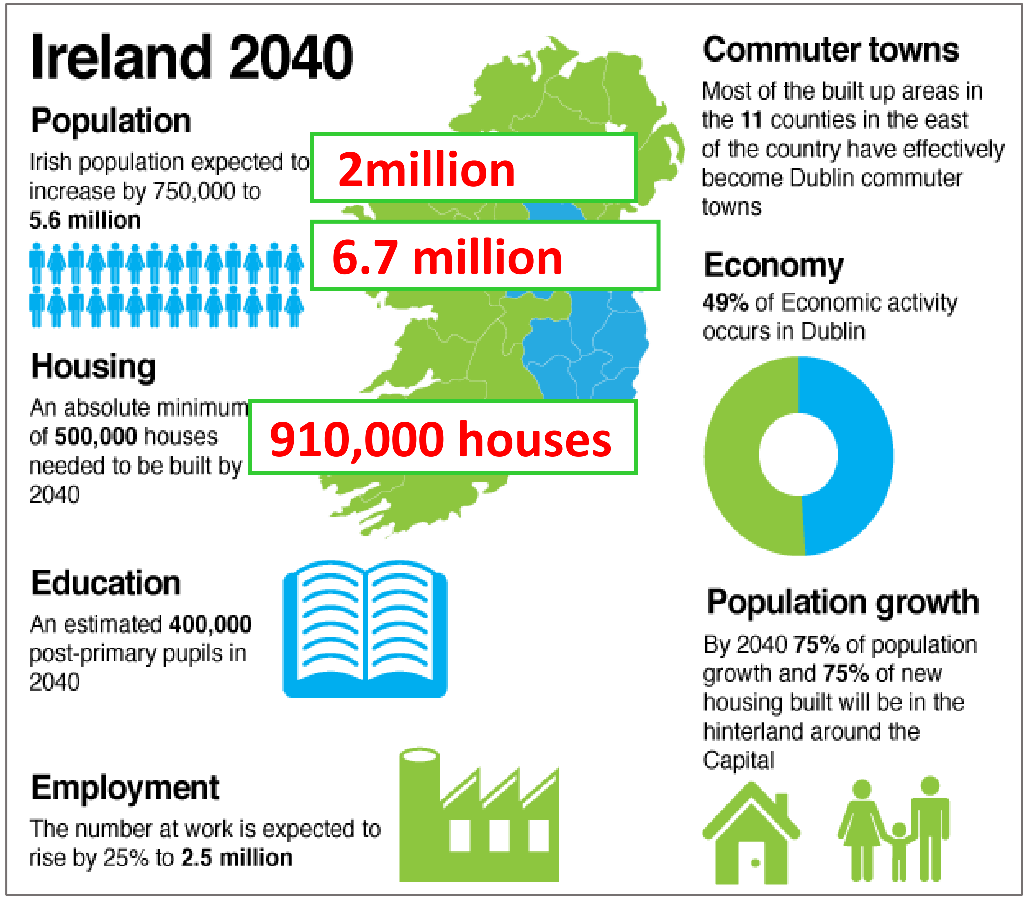
Irish Cities 2070

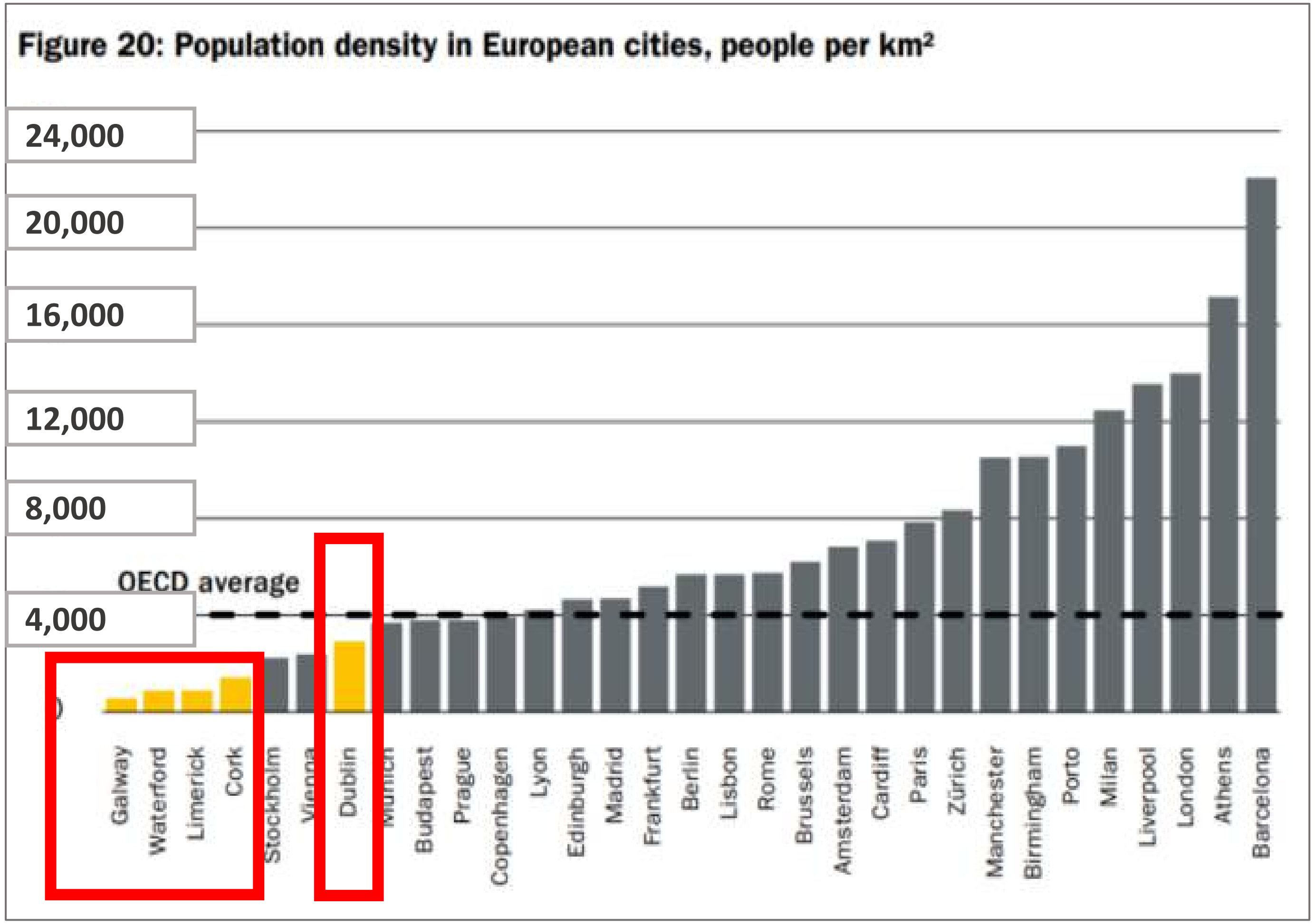
IRELAND 2040
SUSTAINABLE URBAN DEVELOPMENT

WHAT IS THE PROBLEM?

- **IRELAND'S POPULATION GROWTH**
  - 1M to 2040 (NDP) - 2M to 2050 (CSO)
- **LOW DENSITY URBAN GROWTH**
  - UNSUSTAINABLE
- **CLIMATE CHANGE**
  - WINDOW OF 12 YEARS TO ADDRESS IT (IPCC)
- **SPRAWL ERODING AGRICULTURAL LAND**
  - DEVELOPMENT DENSITIES TOO LOW



WHAT IS THE PROBLEM?



IBEC REPORT 2018

WHAT IS THE PROBLEM?

- **OVER RELIANCE ON DUBLIN GROWTH**
  - CONGESTION - SPRAWL - GHG EMISSIONS
- **CORK, LIMERICK, WATERFORD, GALWAY**
  - INDIVIDUALLY SMALL FOR MAJOR FDI AND GROWTH. COLLABORATE NOT COMPETE
- **DUBLIN – BELFAST CORRIDOR**
  - POTENTIAL AS ECONOMIC DRIVER
- **TRANSPORT/SERVICES INFRASTRUCTURE**
  - MAJOR INVESTMENT NEEDED
- **NEED FOR LONG TERM PLANNING NOW**
  - ROADMAP FOR SUSTAINABLE CITY AND TOWN DEVELOPMENT TO 2070

WHAT DO WE NEED TO ACHIEVE?

- COMPACT DENSE, SUSTAINABLE URBAN DEVELOPMENT - AFFORDABLE HOUSING
- CARBON NEUTRAL, ENERGY POSITIVE, BIODIVERSE
- RETENTION OR EXPANSION OF IRELAND'S AGRICULTURAL AND AMENITY LANDS
- EXCELLENT GLOBAL QUALITY OF LIVING INDEX
- HEALTHIER, MORE ACTIVE CITIZENS
- GROW EXCELLENT FDI + INNOVATION ENVIRONMENT
- EFFICIENT WORKING PUBLIC TRANSPORTATION WITHIN CITIES AND NATIONALLY
- CITIES THAT SUSTAIN CONTINUAL DEVELOPMENT THROUGH ACCUMULATED FUNDS

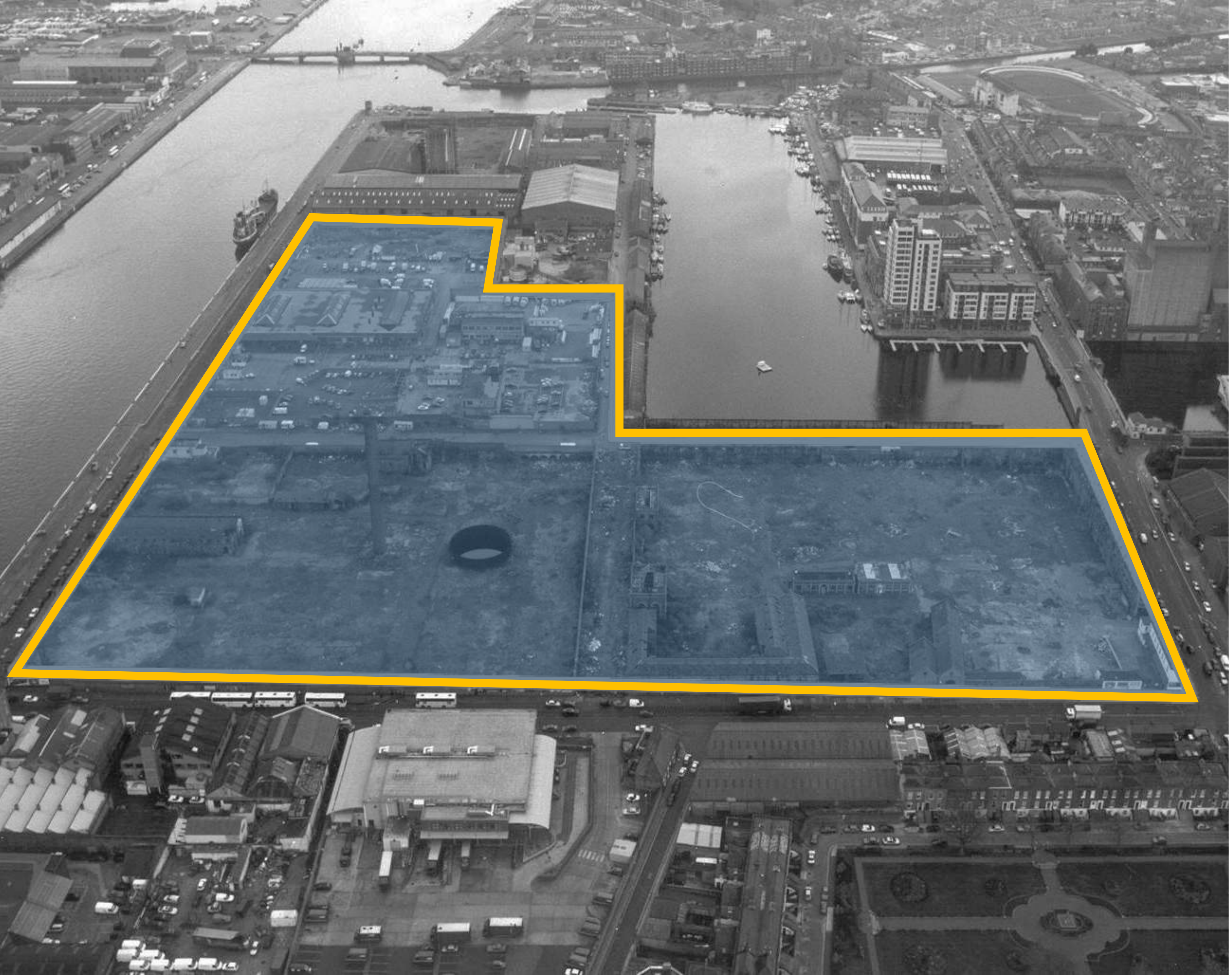
PRECEDENTS

HAMMARBY SJOSTAD, STOCKHOLM

Early 1990s

HAMMARBY SJOSTAD, STOCKHOLM

2009



GRAND CANAL DOCK, DUBLIN 2000

GRAND CANAL DOCK, DUBLIN
2018


BO 01,
MALMO 2000

BO 01, MALMO 2009

BO 01, MALMO 2009


STOCKHOLM
ROYAL SEAPORT
EXISTING


STOCKHOLM
ROYAL SEAPORT
PROPOSAL 2030


Case study: Elephant & Castle
John Prevc – MAKE
LB Southwark, London


Heygate Estate: a walled island


A disconnected housing estate
Buildings are barriers


A connected neighbourhood
Routes form connections

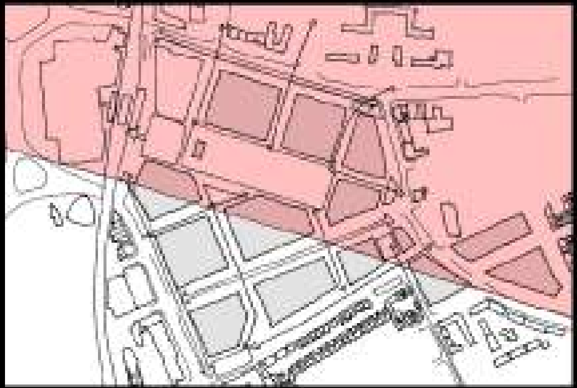
Heygate Estate

John Prevc - MAKE

Height constraints and block typologies

A unique urban and commercial model **John Prevc – MAKE**

A. LVMF constraint

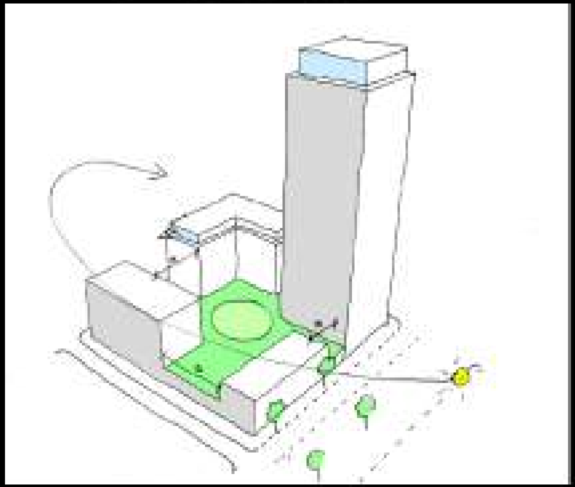


B. Tall building locations

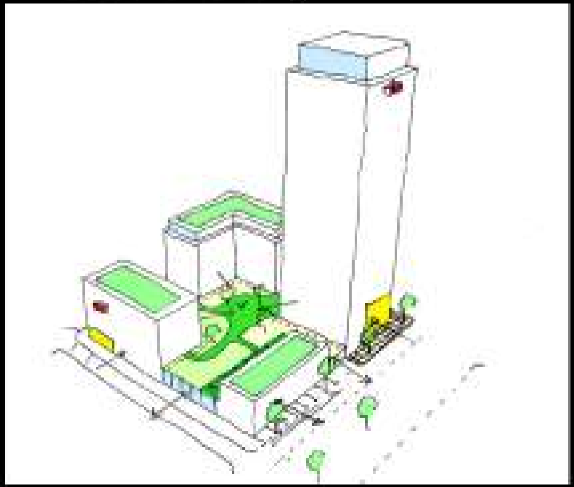
C. Mid-rise blocks

D. Low-rise blocks

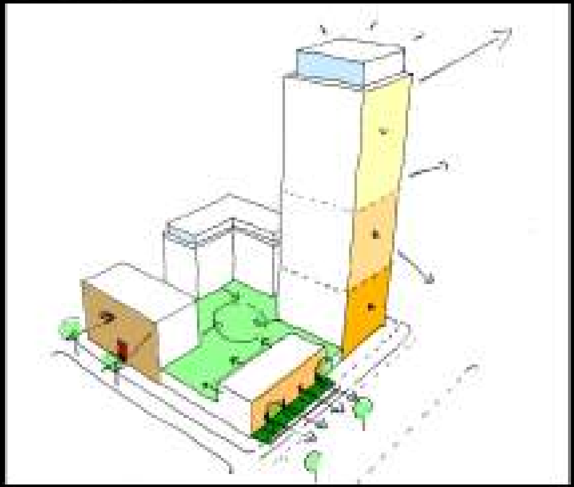
A. Environmental benefits



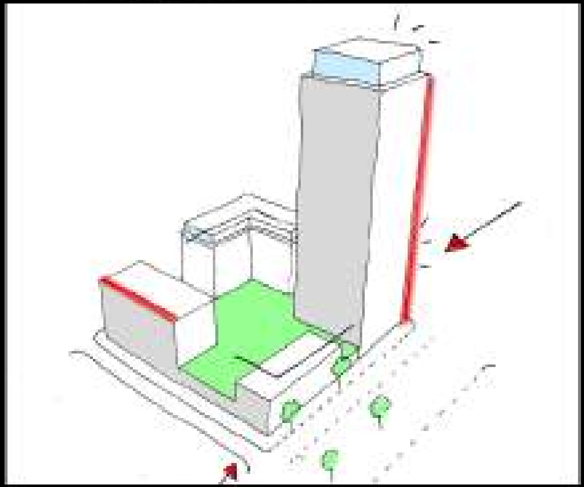
B. Residential amenity



C. Varied mix



D. Townscape definition



Heygate Estate
Elephant & Castle
John Prevc - MAKE

PRINCIPLES

- Don’t expand existing cities – Densify
- Protect or establish Green Belts
- Release Brownfield Land
- Encourage mixed use, small blocks
- Improve local decision making powers
- Ensure local community engaged and in place
- Support LDA and LAs to drive density

SOME LESSONS FROM TWO EUROPEAN CITIES

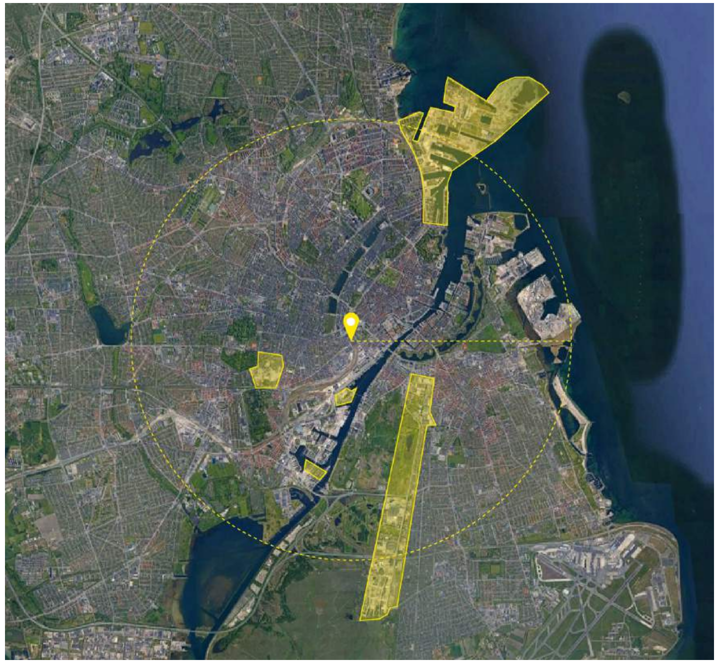
LESSONS FROM COPENHAGEN

COPENHAGEN

DEVELOPMENT STRATEGY - COPENHAGEN

- **Unlock land inside city boundaries close to existing centres**
- **Capitalise infrastructure through re-zoning of publicly owned land**
- **Transit oriented development**
- **CPH City & Port prepare masterplan prior to sale to developers**
- **Development isolated from political interference**

LESSONS FROM COPENHAGEN



01 TRANSFER OF ASSET
National and local government transfer assets to CPH City & Port

02 REZONING OF LAND
Local government rezones the land for residential and commercial use

03 LAND VALUE INCREASES
As a result of new zoning

04 LOAN BASED ON NEW VALUE
CPH City & Port get loans on favourable terms from the Denmark National bank

05 INFRASTRUCTURE INVESTMENT
Capital invested in metro construction, local infrastructure & public amenities for development

06 FACILITATION OF DEVELOPMENT
CPH City & Port develops masterplan with criteria for developers for agreed sale or lease of land. City & Port remains owners of public land and infrastructure

07 REVENUE SERVICES DEBT
Revenue generated used to service debt and reinvest in company

LESSONS FROM COPENHAGEN

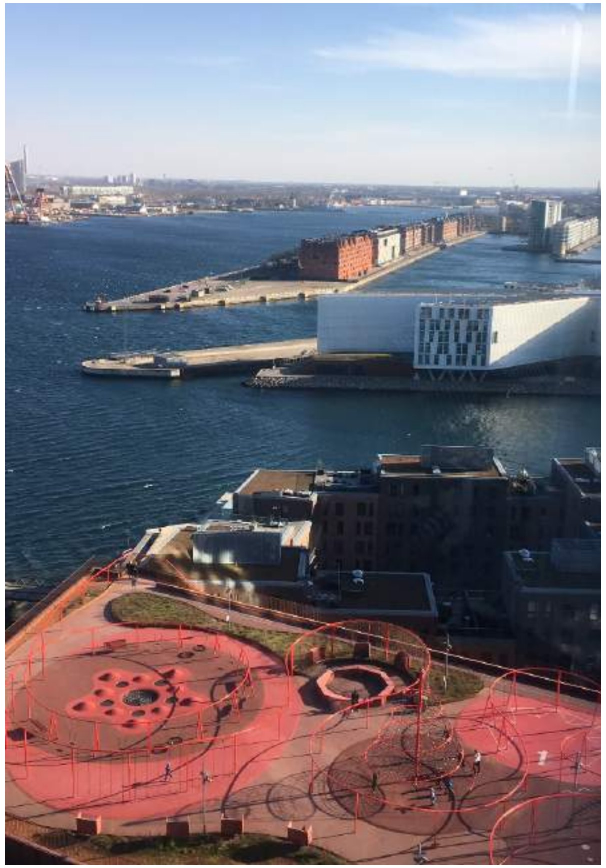
Site Area	300 ha (100 reclaimed)
Timeline	2012-2050 (Ph 1: 2025)
Residential(50%)	1,700 000 m2 40,000 residents
Commercial	1,700 000m2 40,000 jobs

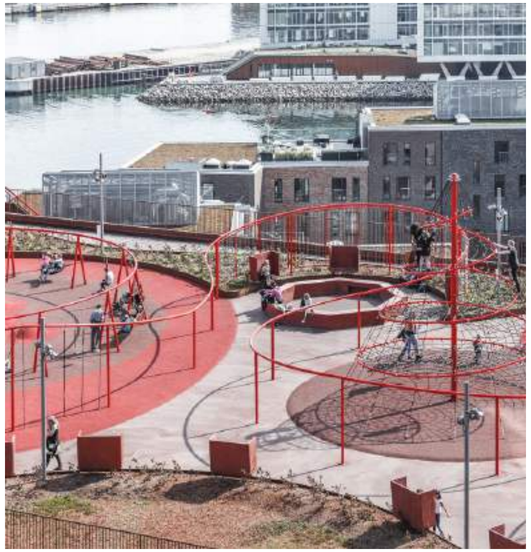
- Regeneration of port to mixed use urban district
- 5 min neighbourhoods
- 33% bicycles, 33% public transport max 33% cars

LESSONS FROM COPENHAGEN

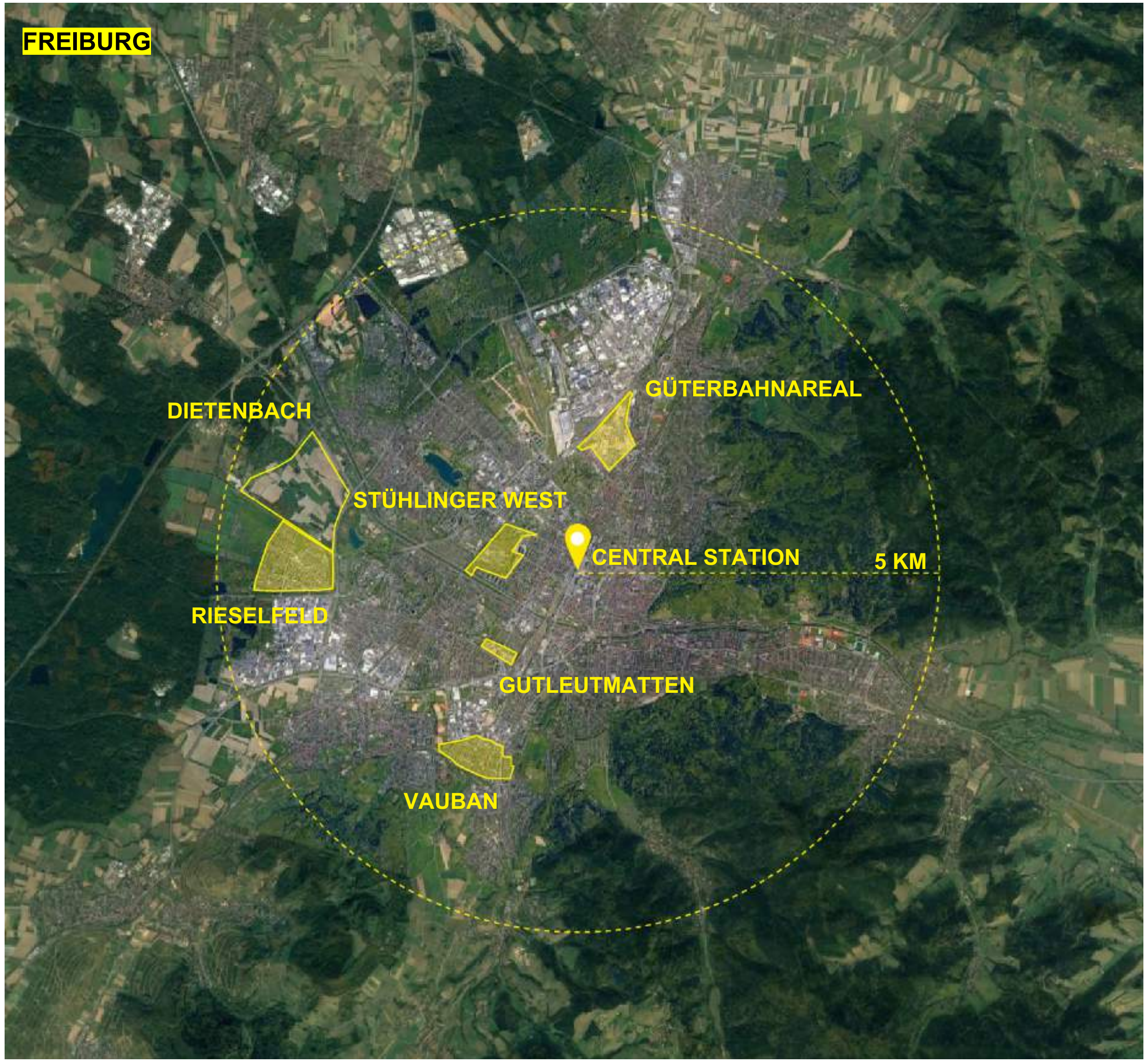
CAR PARKING STRATEGY

- **No basement car parking**
- **Multi storey car parks designed for re-use as offices or residential as car parking needs reduce**





LESSONS FROM FREIBURG



DEVELOPMENT STRATEGY - FREIBURG

- Densifying within City limits since 1980
- 15 year Land Use Plan – experts, politicians, public
- City acquires land close to current use value
- Capitalises infrastructure and amenities through re-zoning
- Small plots sold to developers, building groups and private builders

LESSONS FROM FREIBURG

DEVELOPMENT INVESTIGATION

New land development based on housing need, within existing land use plan. Right to obtain land

01

02

LAND ACQUISITION APPROVAL

Council approves programme for land acquisition and development, including a set future land value

DESIGN COMPETITION

Open design competition for masterplan, within the programme

03

04

DEVELOPMENT BRIEFS

Based on winning masterplan, council prepares briefs for developers, building groups and private owners

ALLOCATE PLOTS

Developers, building groups and private owners compete for land, based on quality of proposals

05

06

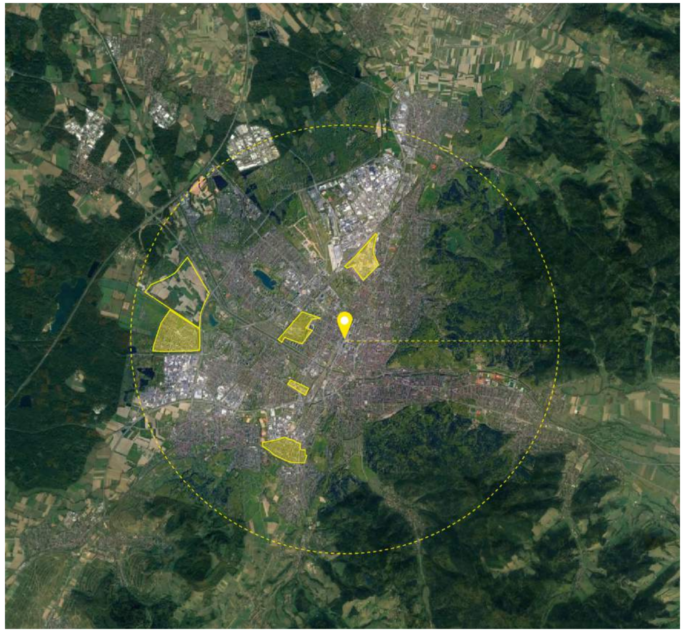
FACILITATE DEVELOPMENT

Council receives loan from local bank (Sparkasse) to prepare land for development (infrastructure, amenities etc)

REVENUE SERVICES DEBT

Generated revenue from sold land is used to repay the loan

07

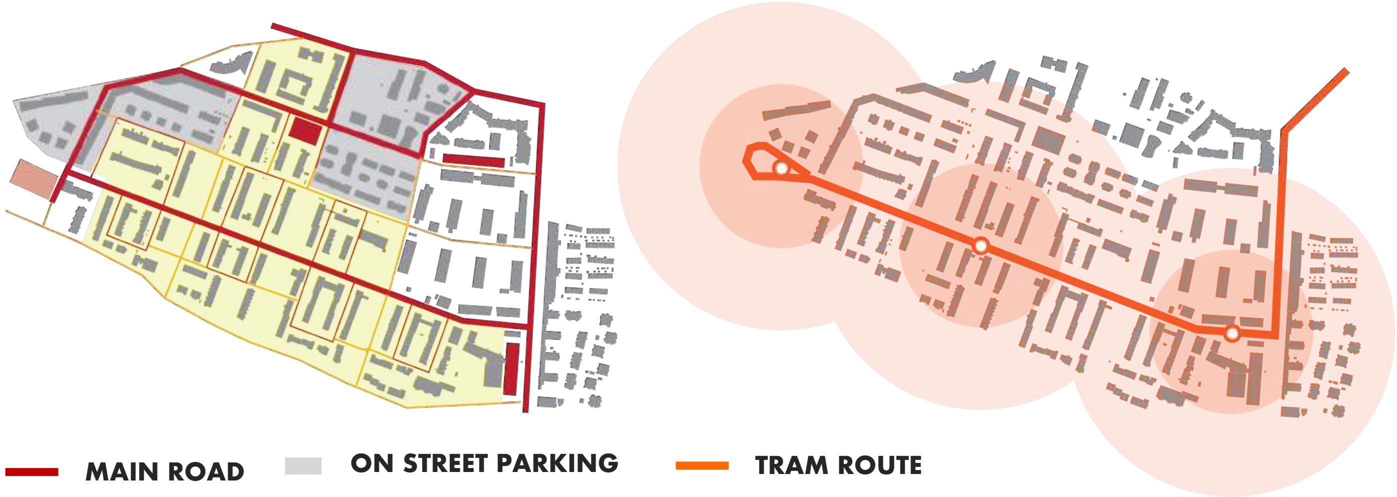


LESSONS FROM FREIBURG:

Site Area	38 ha
Timeline	1993-2007
Residential	2,500 dwellings 5,500 residents
Commercial	Town centre retail Creches and school

- Regeneration of military barracks
- 45% of people opt for no car / parking
- Energy standards 1/3 German average
- Small plots - majority reserved for building groups and small builders
- Car free streets, no parking, only loading

LESSONS FROM FREIBURG: VAUBAN



MAIN ROAD
ACCESS ROAD
BIKE ROAD
ON STREET PARKING
CAR FREE AREA
RESIDENTIAL CAR PARK
TRAM ROUTE
100 M
200 M

TRANSPORT HIERARCHY

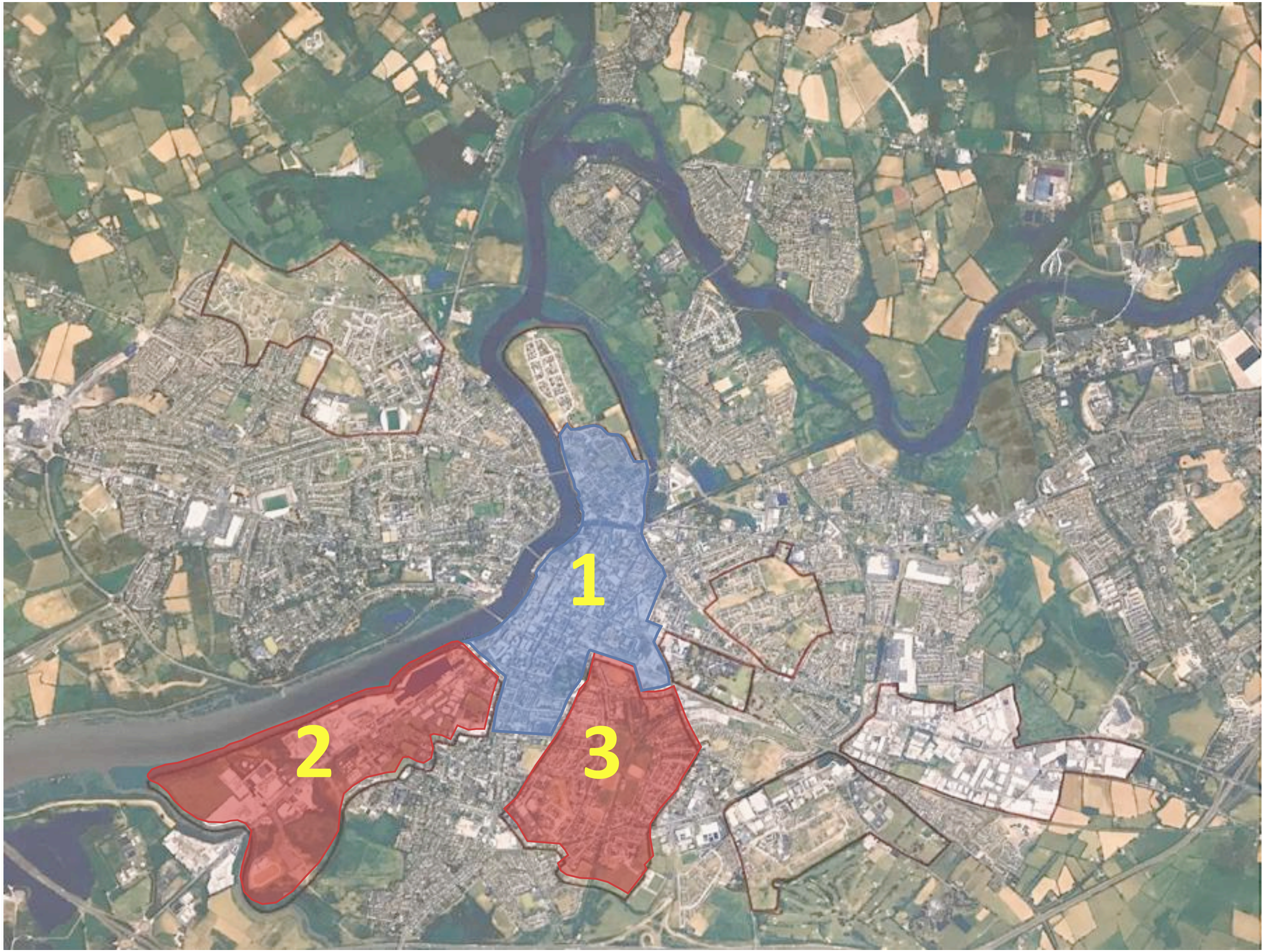
- People first approach
- Extensive pedestrian and bike network
- Car free area: 5km/h speed limits
- Multi-storey car parks built based on demand – reserved plots now community garden
- Green tram line – less noise, less pollution, lower cost

LESSONS FROM FREIBURG: VAUBAN

VAUBAN KEY FEATURES

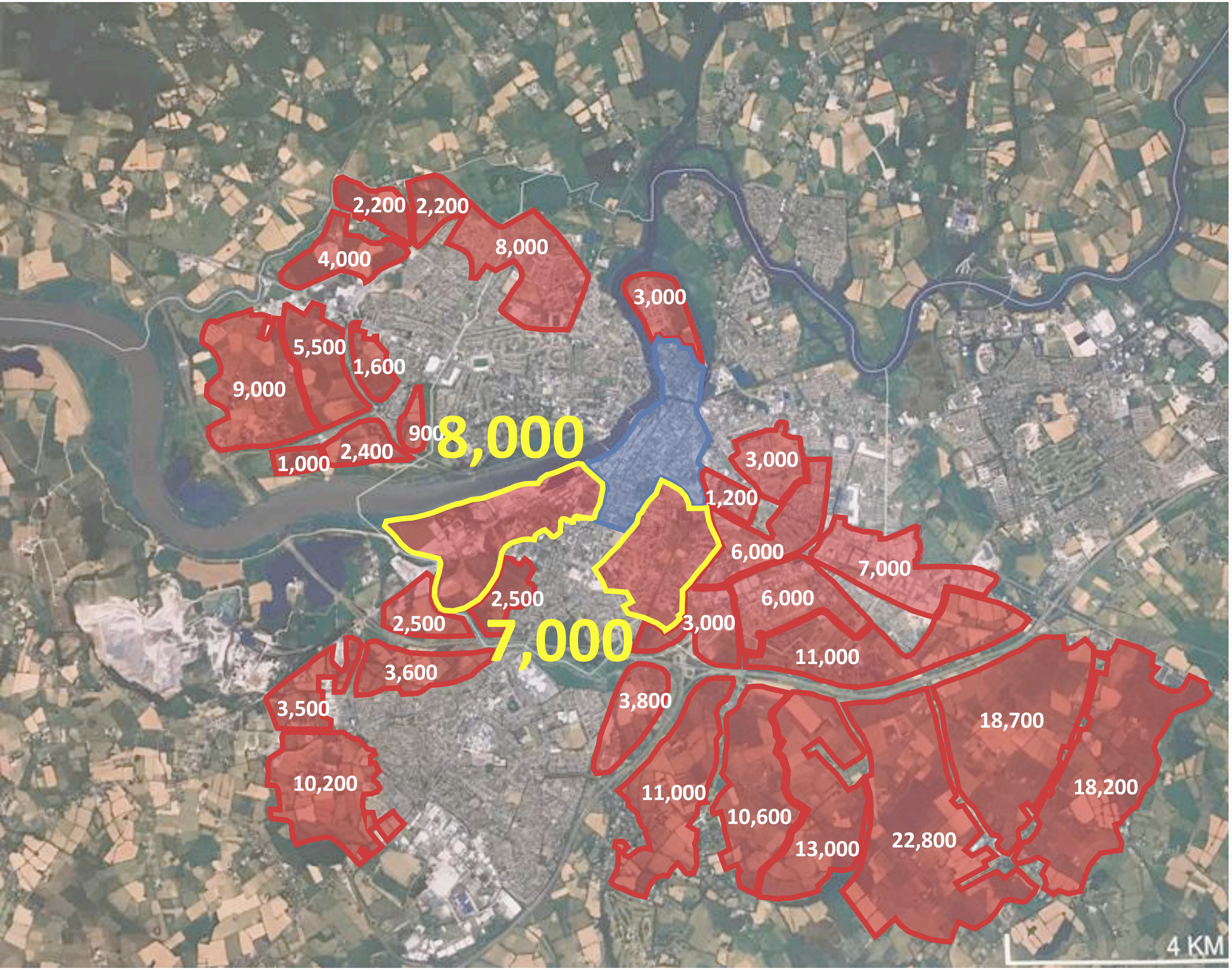
- **Variety of architecture and mixed-use buildings**
- **Biodiverse lush landscape**
- **People oriented streets**

WHAT COULD DENSIFYING OUR CITIES MEAN?



Limerick

1. **Limerick City Centre**
2. **Limerick Docklands**
3. **Ballinacurra-Weston Limerick Central Park**



Limerick

Additional Population

300,000 – 210,000

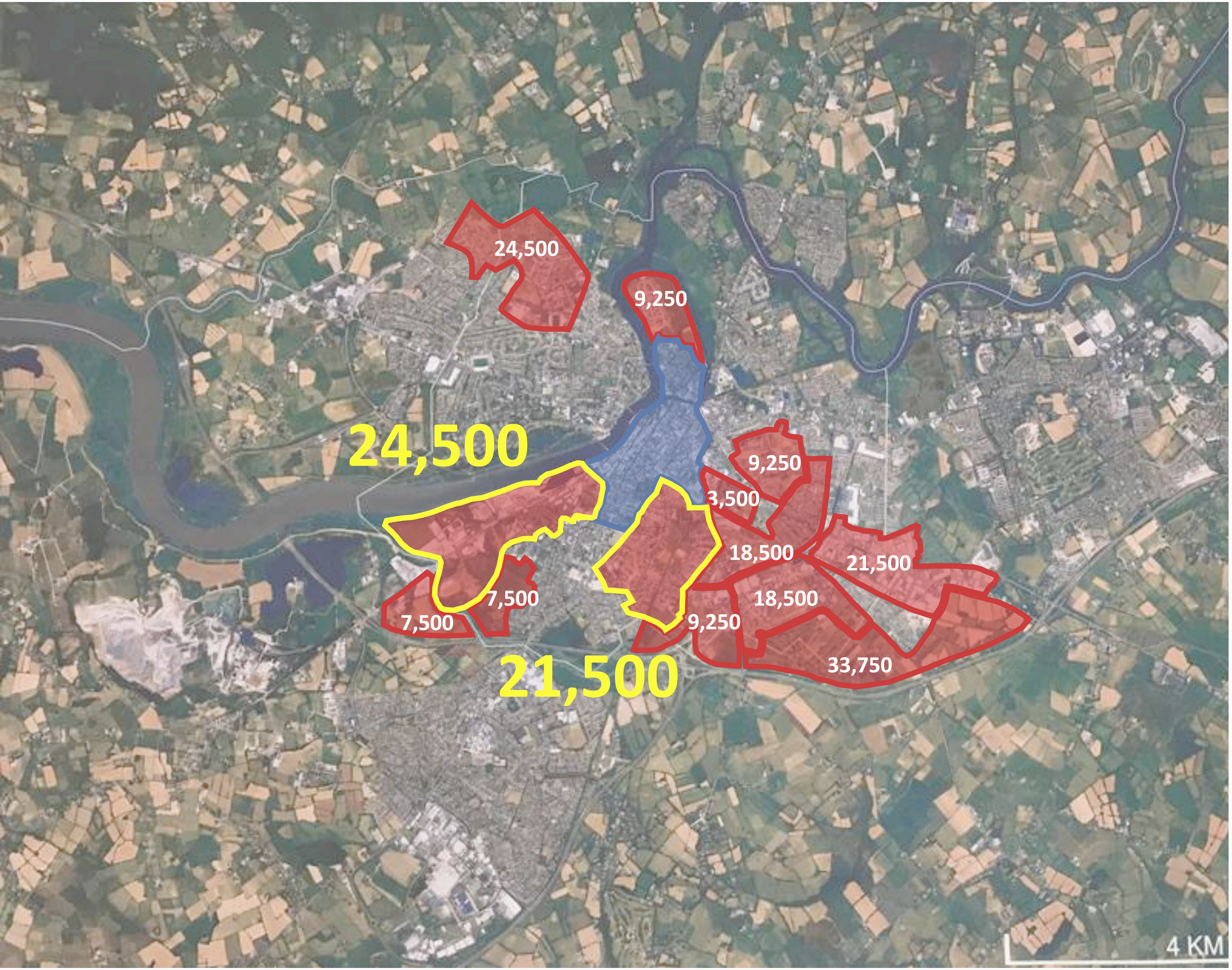
Density

35 Residences / Ha

100 People / Ha

Land Required

2,124 Hectares (100%)



Limerick

Additional Population

300,000 – 210,000

Density

115 Residences / Ha

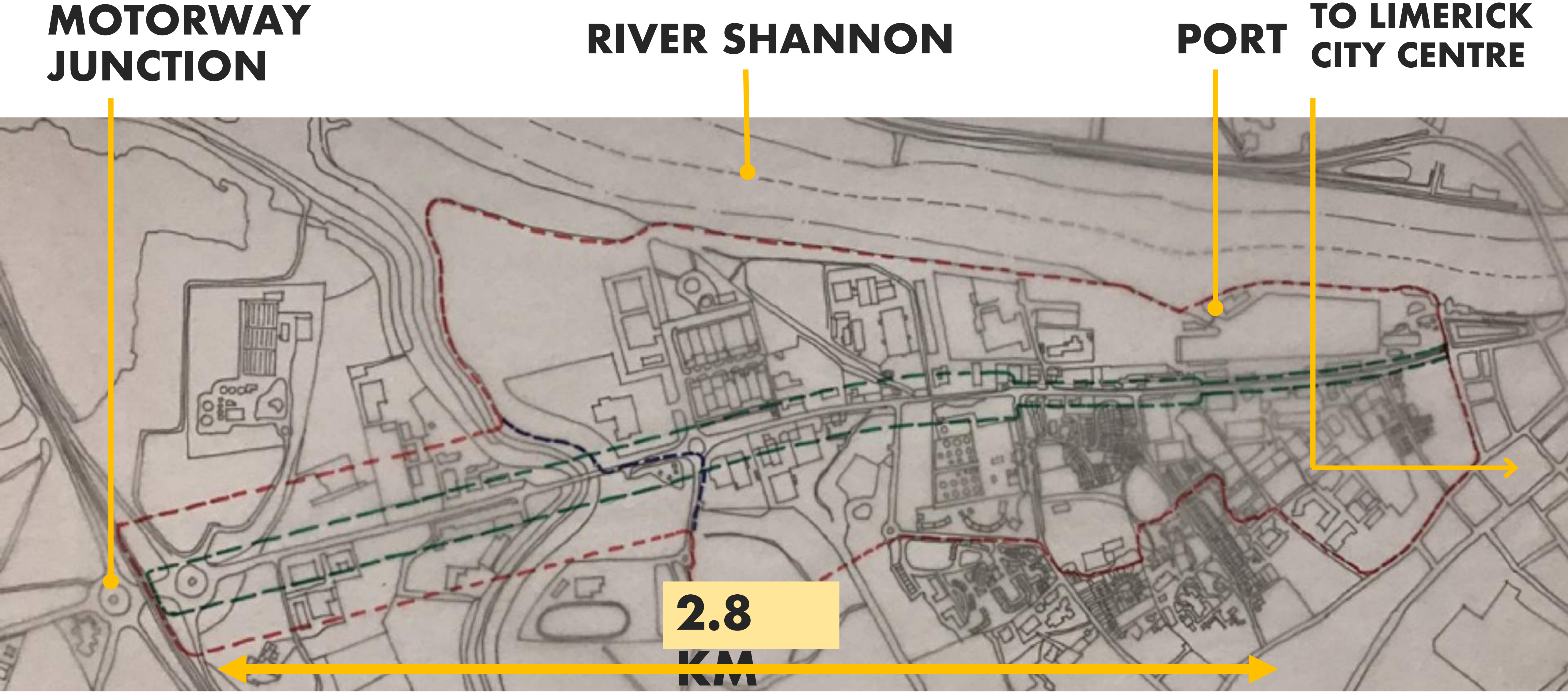
330 People / Ha

Land Required

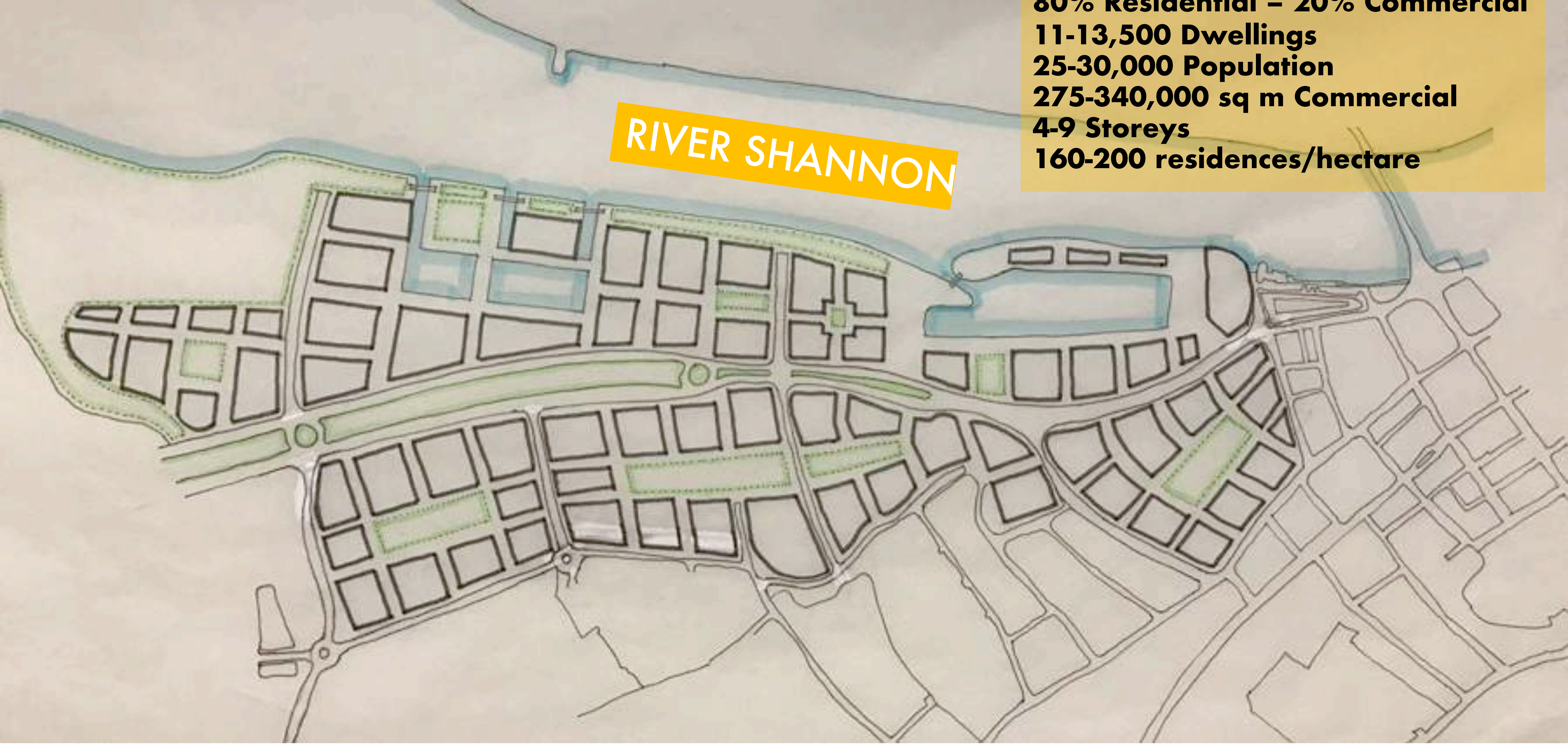
682 Hectares (32%)

Limerick Docklands

Limerick Docklands - 2019



Limerick Docklands - 2019

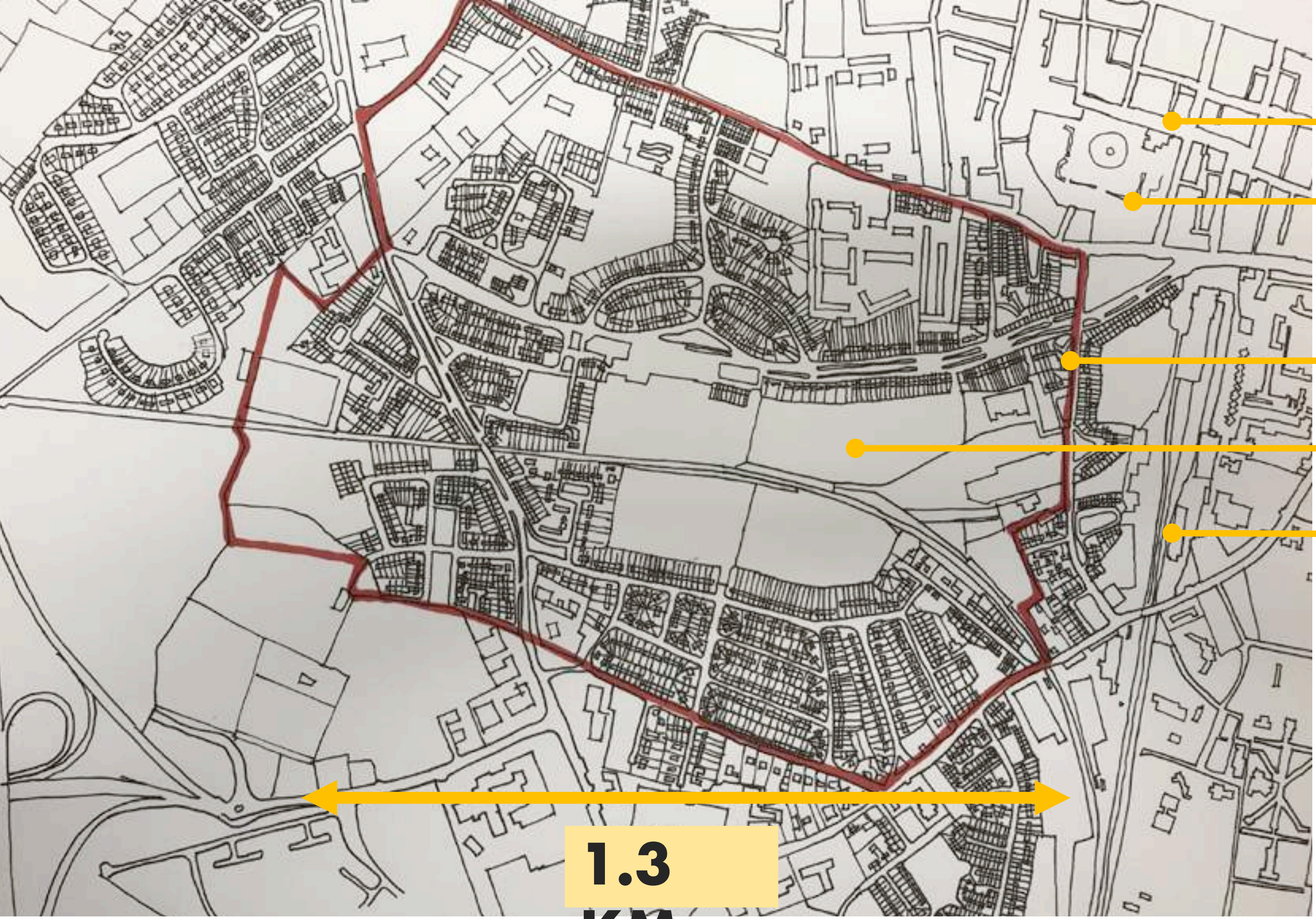


Limerick Docklands – 2050?

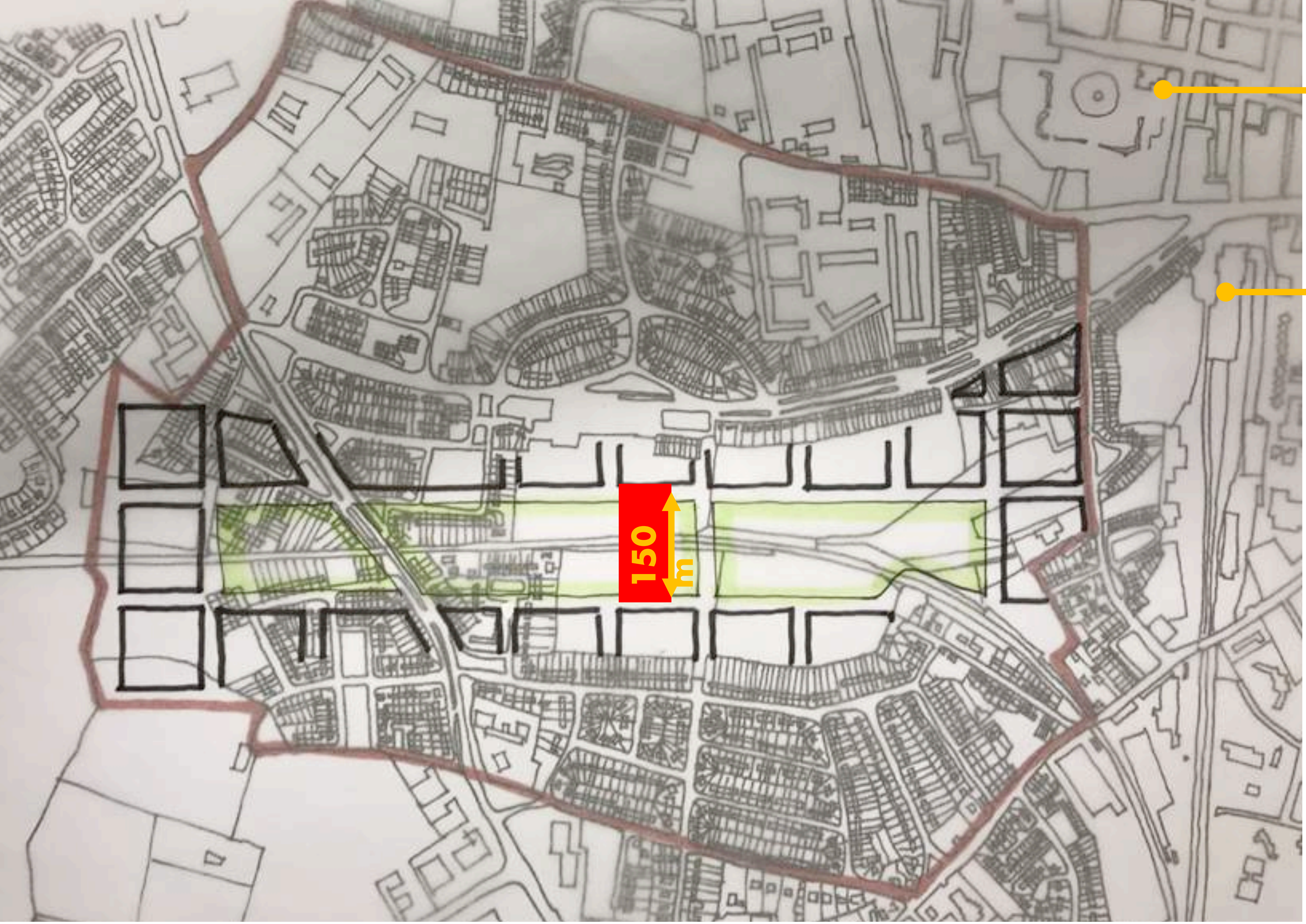
Limerick Ballinacurra - Weston Central Park



Limerick – Ballinacurra 2019



Limerick – Ballinacurra 2019



PERY SQUARE

LIMERICK RAILWAY STATION

Early Phases of Development

Mid Phases of Development

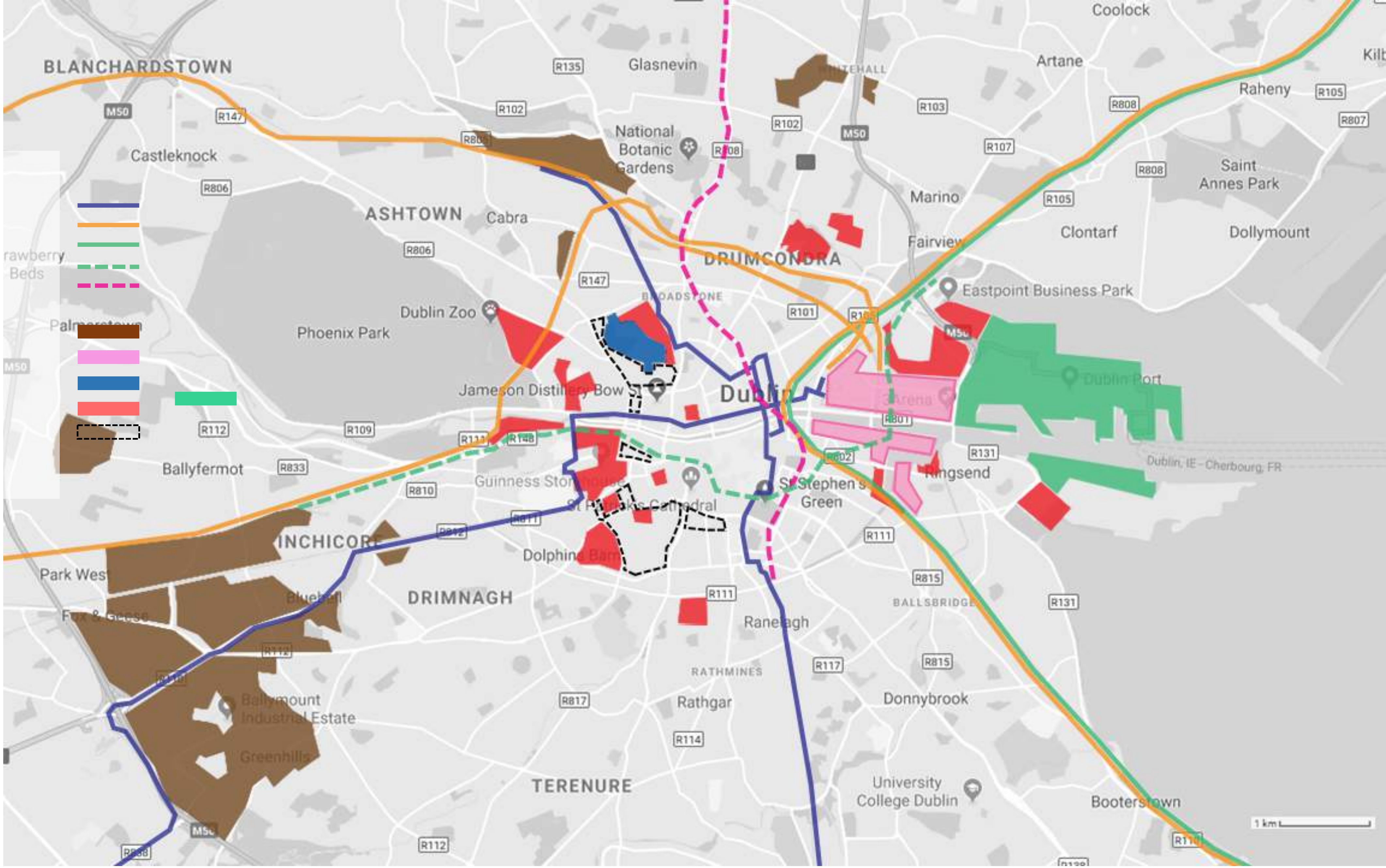
Limerick – Ballinacurra 2050?

70 hectares
80% Residential – 20% Commercial
11-14,000 Dwellings
26-32,000 Population
280-350,000 sq m Commercial
4-12 Storeys
160-200 residences/hectare

LEGEND

LUAS
Suburban Lines
DART
Proposed DART underground
Proposed METRO

Industrial Estates
Docklands 1989-2020
Grangegorman
Potential available sites
Areas for densification
Dublin Port

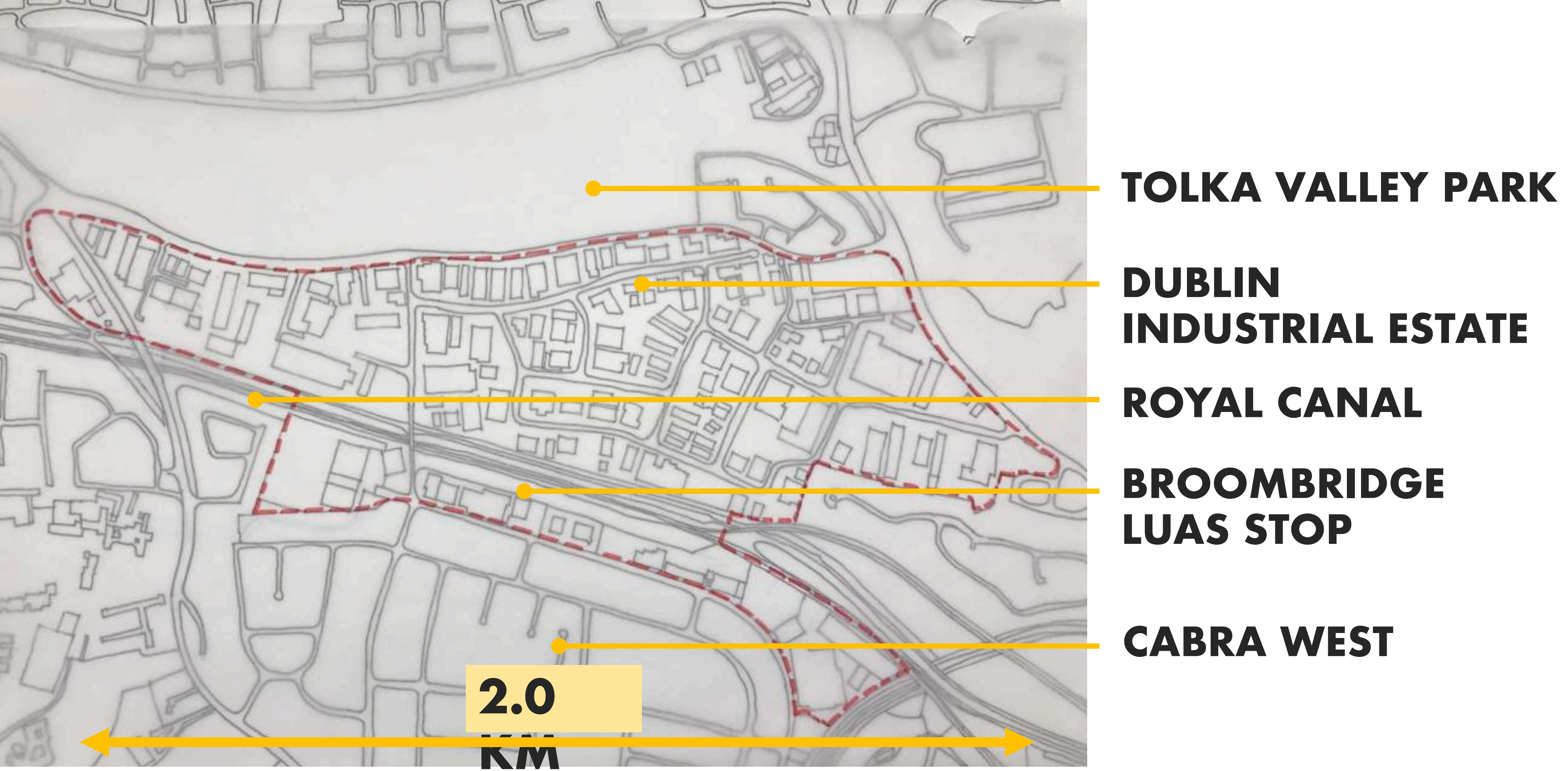


EXPANSION OF DUBLIN’S CBD?

Dublin

Broombridge

Dublin Industrial Estate, 2019

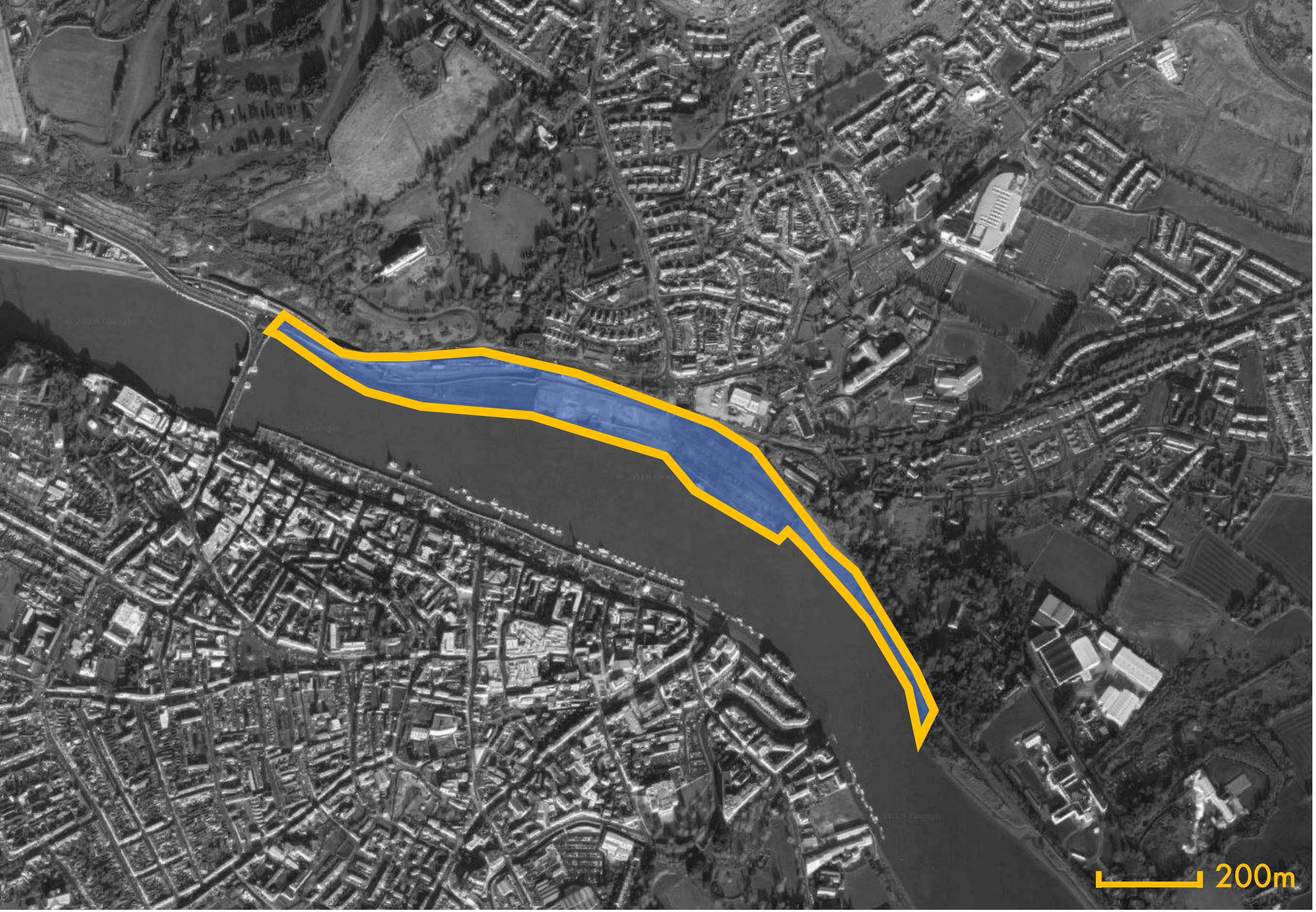


Broombridge, Dublin 2019

55 hectares
80% Residential – 20% Commercial
11-13,000 Dwellings
25-30,000 Population
270-325,000 sq m Commercial
4-12 Storeys
200-240 residences/hectare

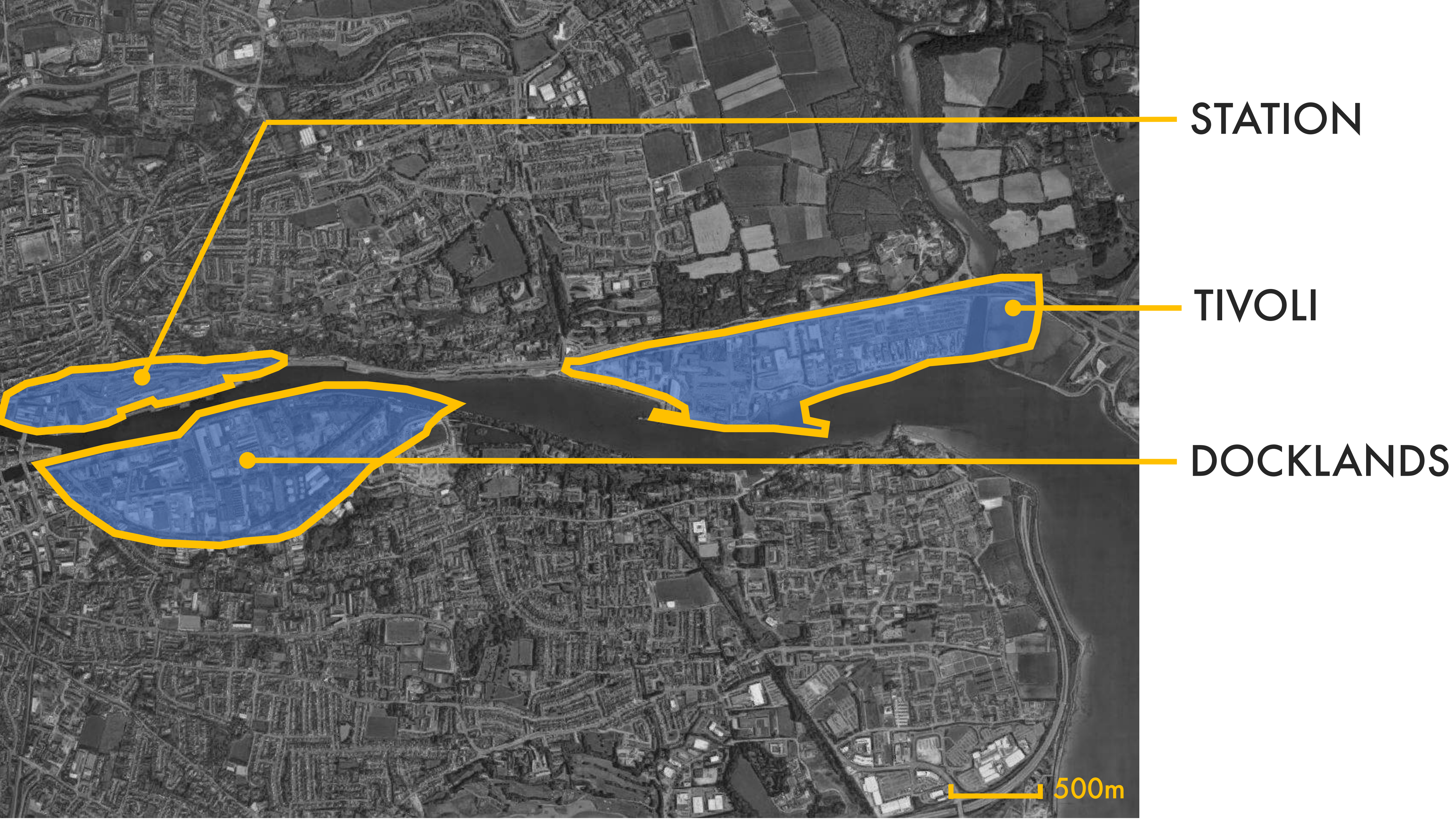
Broombridge, Dublin 2050?

OTHER IRISH CITIES



Waterford – North Quays

Galway – Docks



Cork - Docklands / Tivoli / Station

DUBLIN, CORK, WATERFORD, LIMERICK, GALWAY 2070?