



South Cambridgeshire Local Plan Examination: Matter SC6A Appendices (SS/5 Waterbeach New Town)

 RLW Estates / DIO (18277) Representation Numbers: 60384,
60385, 60372-60375, 27651 (CC rep)

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LIST OF APPENDICES

Appendix One – Waterbeach Site Wide Capacity Study

Appendix Two – Waterbeach New Settlement – Transport Characteristics

Appendix Three – Planning for sustainable travel (2009) (Extracts)

Appendix Four – Alternative Development Patterns – New Settlements (1993) (Extracts)

Appendix Five – Employment Estimates Paper (DLA)

Appendix Six – GTR Consultation on 2018 Timetable

Appendix Seven – Agricultural Land Classification Map

Appendix Eight – Relocation of Waterbeach Station: Statement of Purpose, Costs, Benefits and Timescale

Appendix Nine – New Waterbeach Station GRIP 2 Report (2016)

Appendix Ten – Letter from Stephen Kelly (SCDC) to DfT on Station Support

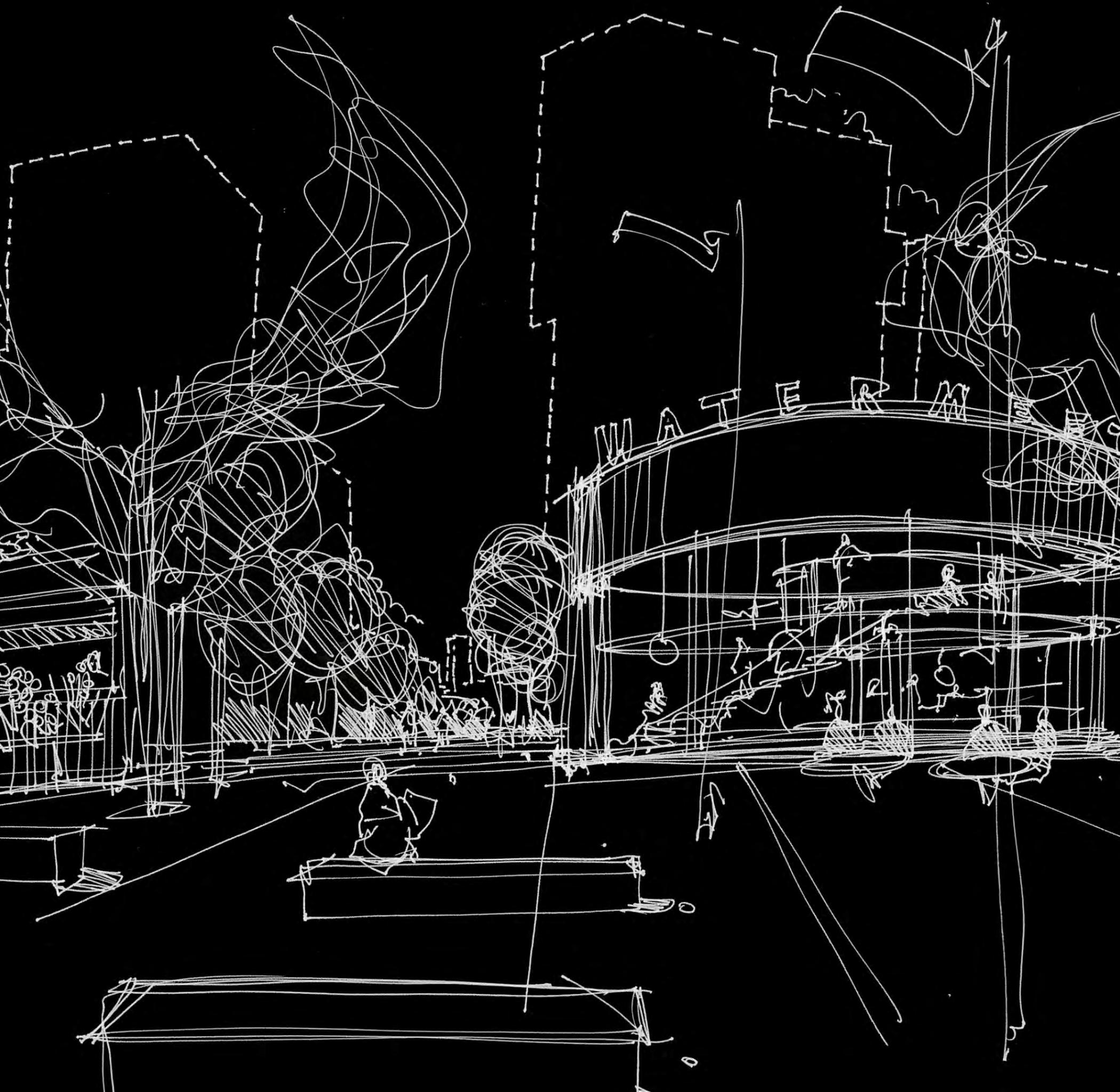
Appendix Eleven – Denny Abbey and its Setting: Analysis and Recommendations for the Waterbeach New Town (November 2014)

Appendix Twelve – Waterbeach Water Cycle Study

Appendix Thirteen – Waterbeach Water Cycle Study Stakeholder Correspondence

Appendix Fourteen – Existing and Proposed Station Walking Isochrones Plans and Graphs

APPENDIX ONE – WATERBEACH SITE WIDE CAPACITY STUDY



WATERBEACH

SITE WIDE CAPACITY STUDY

16.02.2017

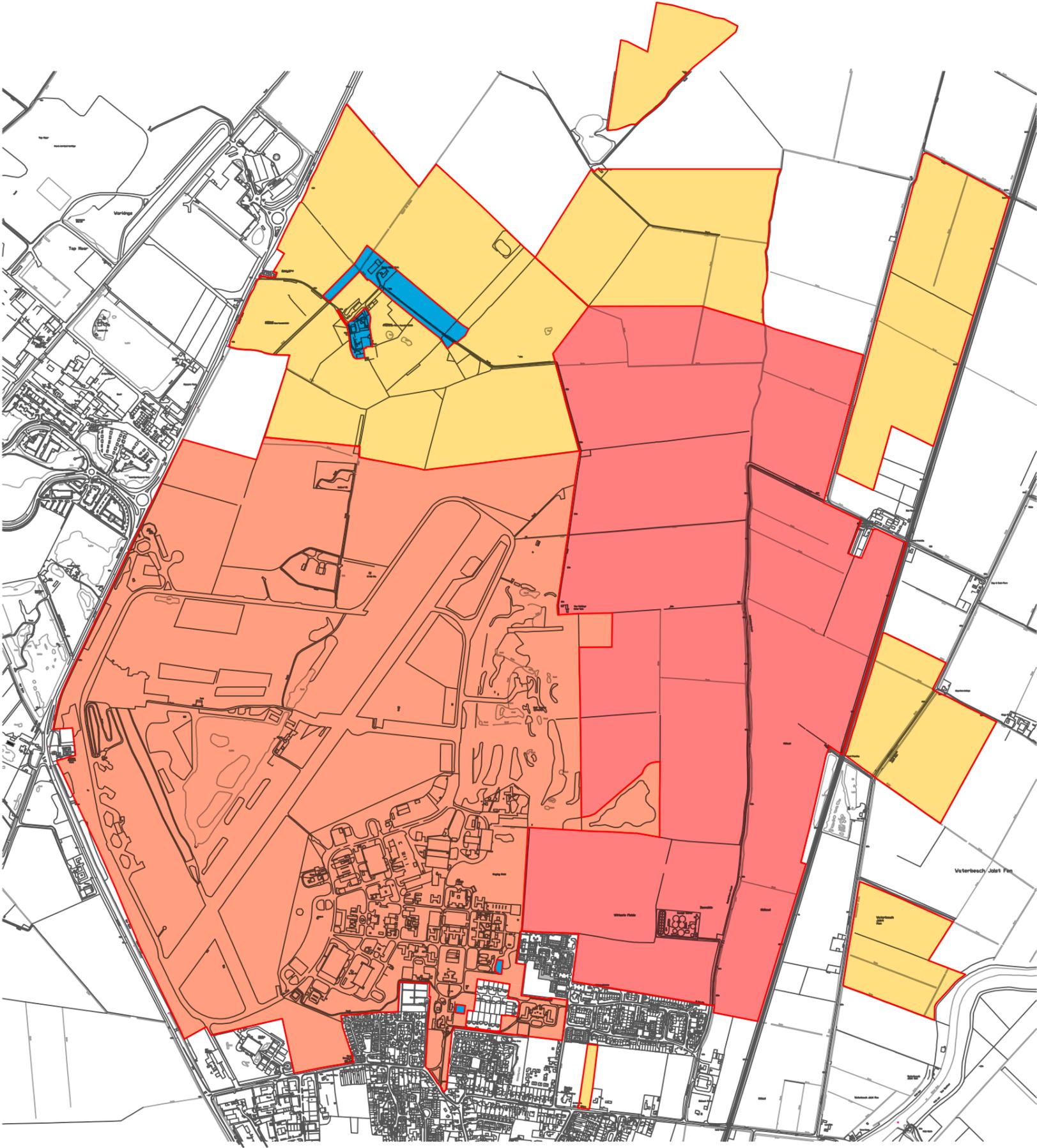
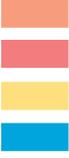
INTRODUCTION

This study brings together the latest capacity testing undertaken by U&C and RLW for their respective land parcels to demonstrate the combined development potential at Waterbeach New Town. The report has been prepared as supporting evidence to Question 1(i) and 1(ii). (South Cambridgeshire Local Plan Examination: Matter SC6A – Policy SS/5 Waterbeach New Town.) This work has been undertaken on behalf of RLW Estates and uses the Waterbeach Barracks and Airfield Capacity Study (August 2016) prepared on behalf of U&C as the basis for the development area and capacity of the U&C land parcels. The framework plans are included as a broad indication of the current masterplanning principles including the location of landuses, infrastructure and green spaces, they will be subject to a more detailed masterplanning exercise in due course.

SITE OWNERSHIP PLAN

LEGEND

- MOD LAND- U&C
- RLW TRUST LAND
- OTHER LAND IN RLW/TRUSTEE OWNERSHIP OR CONTROL
- ADDITIONAL AREAS WITHIN AAP BOUNDARY

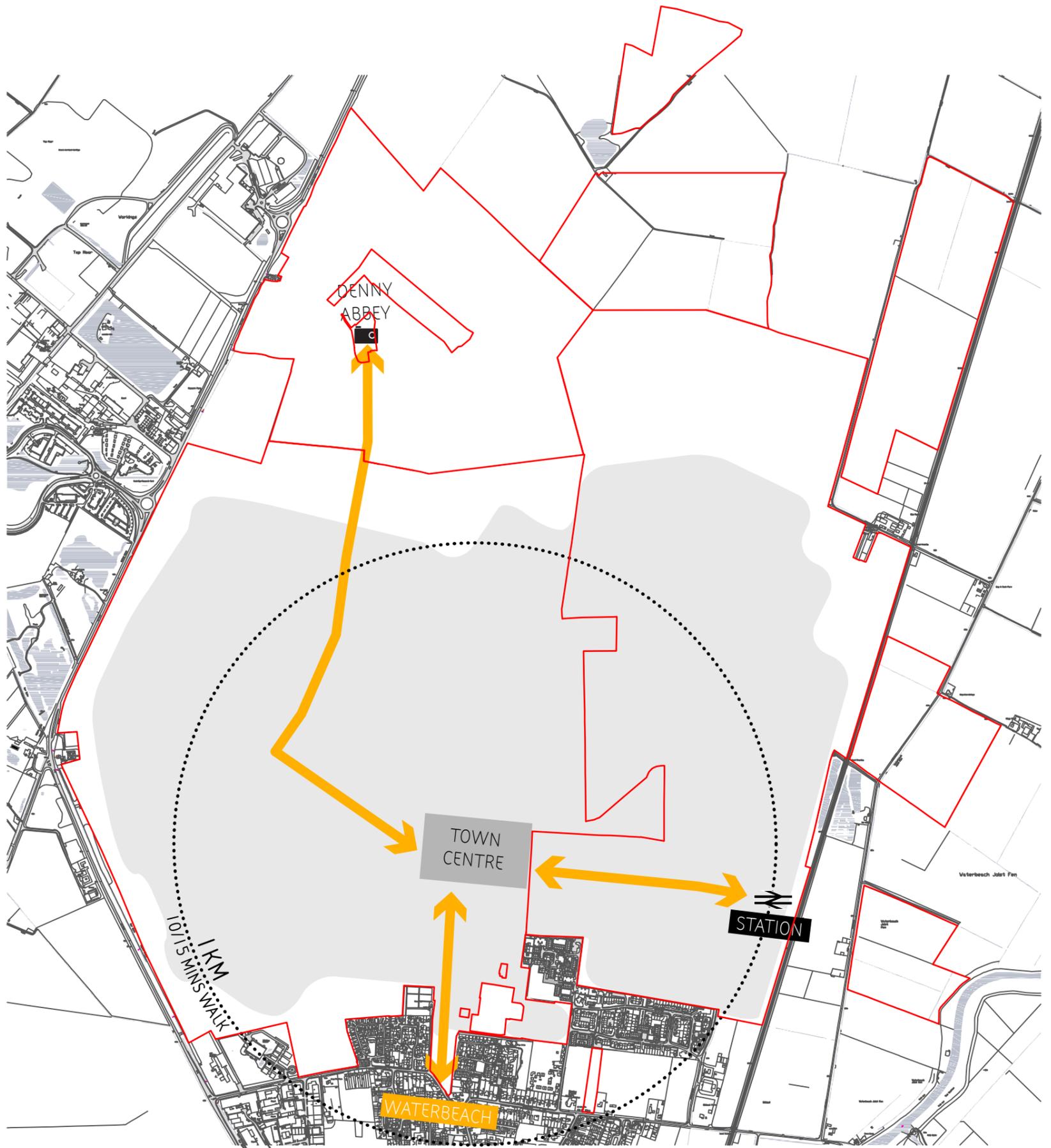


1.0 SITE PRINCIPLES

The following section identifies the main site wide structuring elements that will underpin the creation of a legible and distinctive new settlement.

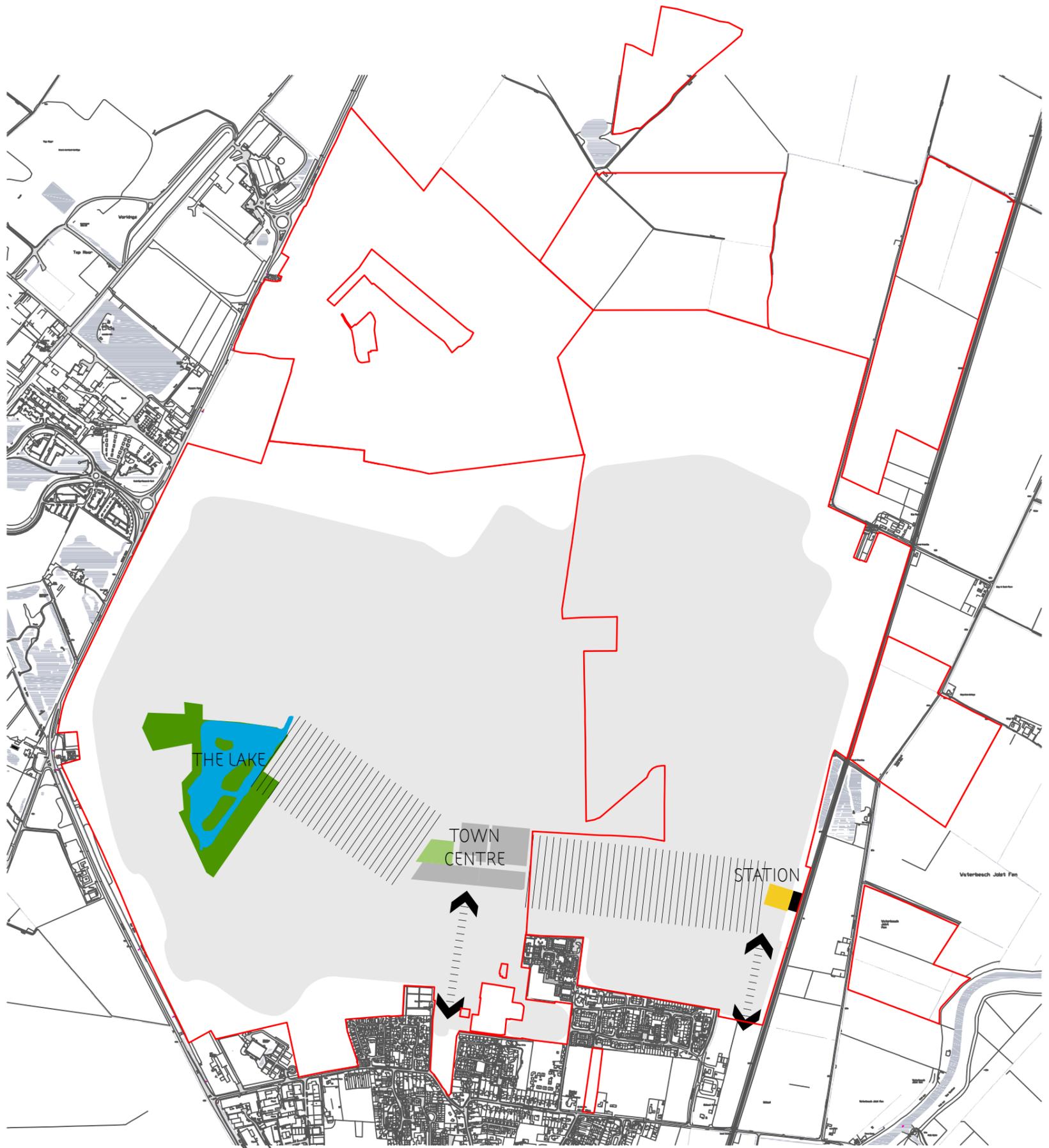
1.0 SITE PRINCIPLES

1.1 WELL CONNECTED TOWN CENTRE



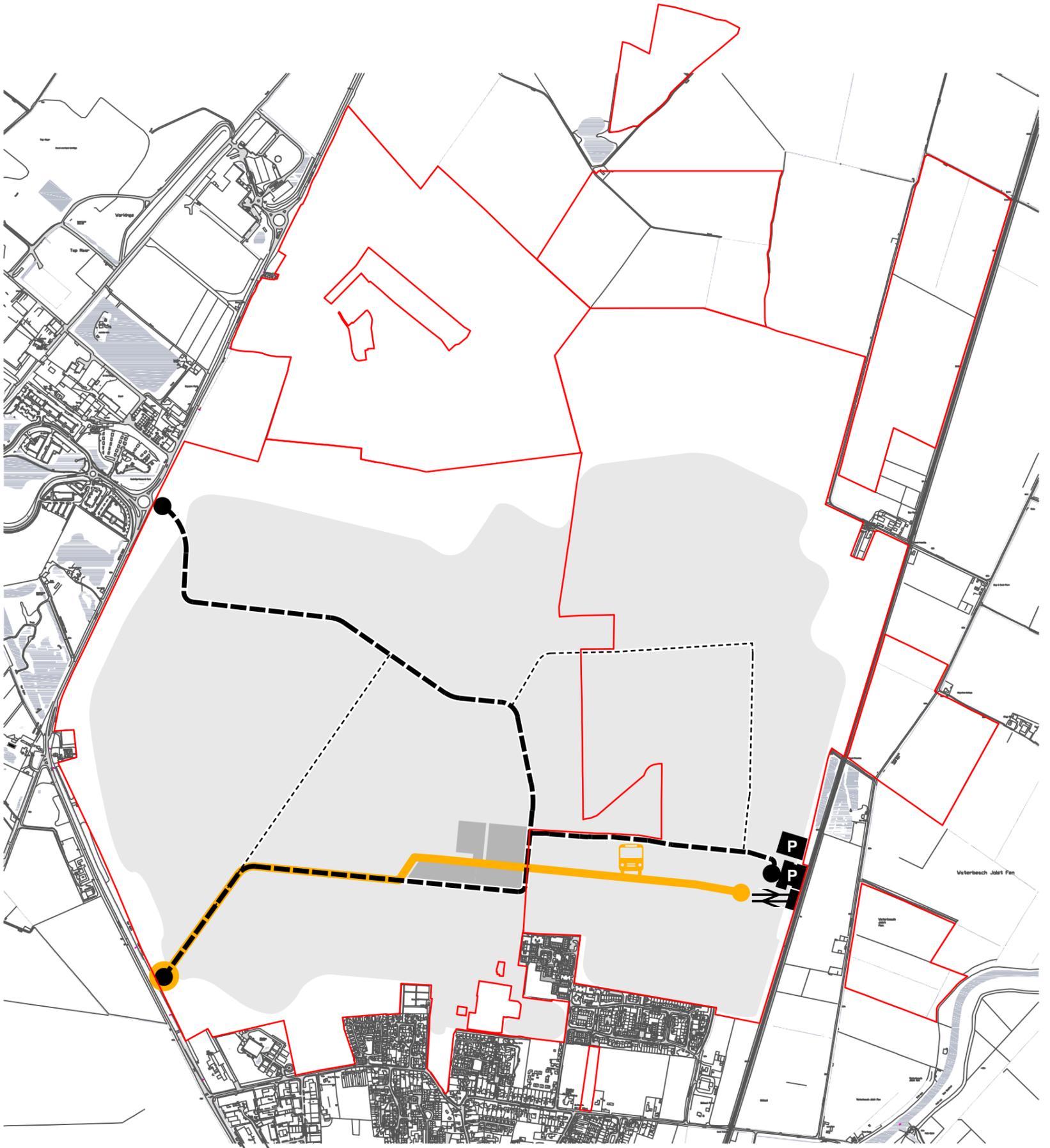
- The Town Centre is located centrally within the development to ensure that it is within 10/15min walk of the majority of new homes. It is also positioned at the junction of the main walking and cycling routes between the existing Waterbeach village, Denny Abbey and the Railway station.

1.2 A CLEAR RELATIONSHIP BETWEEN THE LAKE, TOWN CENTRE AND PROPOSED STATION



- The creation of a high density civic spine with a direct pedestrian route will link the key destinations of the Lake, the Town Centre and the proposed Railway station. This civic spine will form a crucial part of the identity of Waterbeach New Town.

1.3 CLEAR AND LEGIBLE STREET HIERARCHY.



- The Primary Streets should be clearly read as the highest order streets in the development and should be designed to direct people to the Town Centre and Railway Station. A proposed bus link will run through the civic spine and connect up with the Primary Street within the Town Centre before joining the A10.

1.4 CONNECTED GREEN AND BLUE INFRASTRUCTURE DIAGRAM.



- A network of well distributed green and blue corridors will provide amenity space and a proportion of SUDS capacity. Proposed Open Spaces should be focussed along this network where possible to ensure green infrastructure assets are interconnected and positioned along attractive walking and cycling routes.

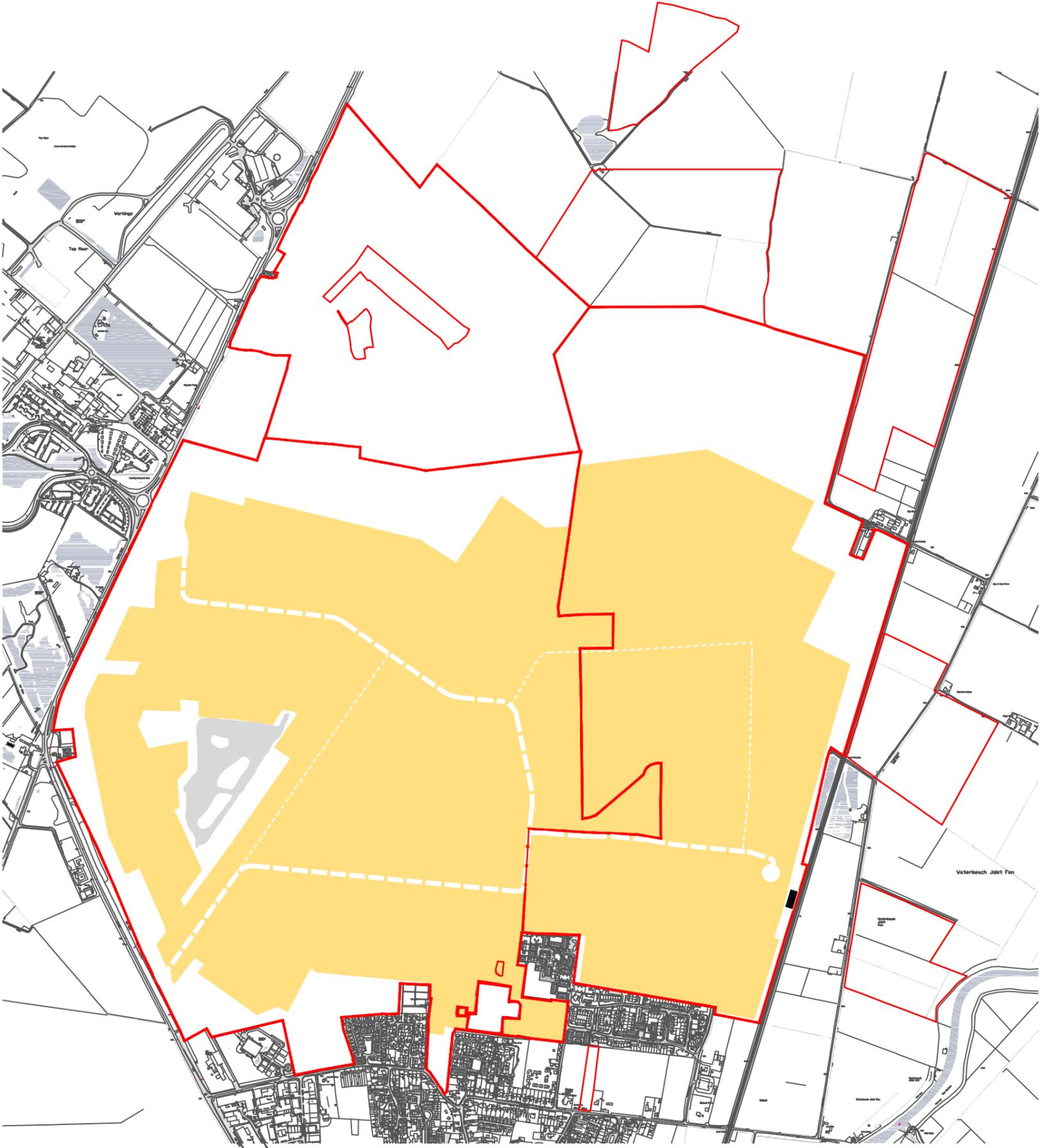
(The green stars suggest a broad distribution of open space capable of meeting South Cambridgeshire District Council's accessibility guidance for open space. This ensures open space will be within 270m walking distance of new residents)

2.0 DENSITY DRIVERS

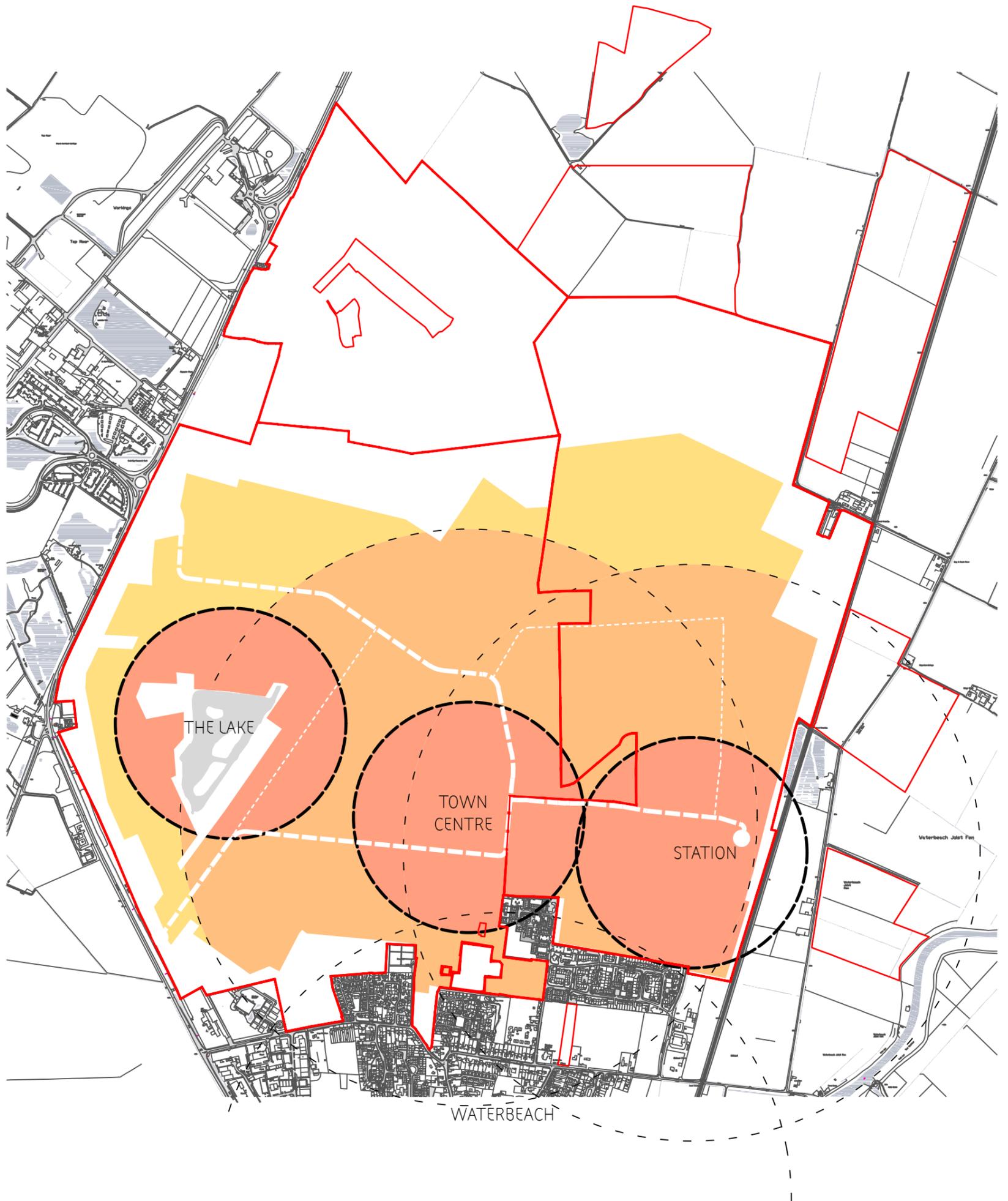
The density drivers on the following pages are based on a response to the existing site conditions and context as well as proposed land uses and key infrastructure items. The suggested densities are intended to allow for a range of house types, allow sensitive design response to the context but also provide a critical mass of people to support investment in new infrastructure and community facilities and to encourage walkable and active neighbourhoods. These residential densities are used later in the report to determine appropriate housing numbers.

2.0 DENSITY DRIVERS

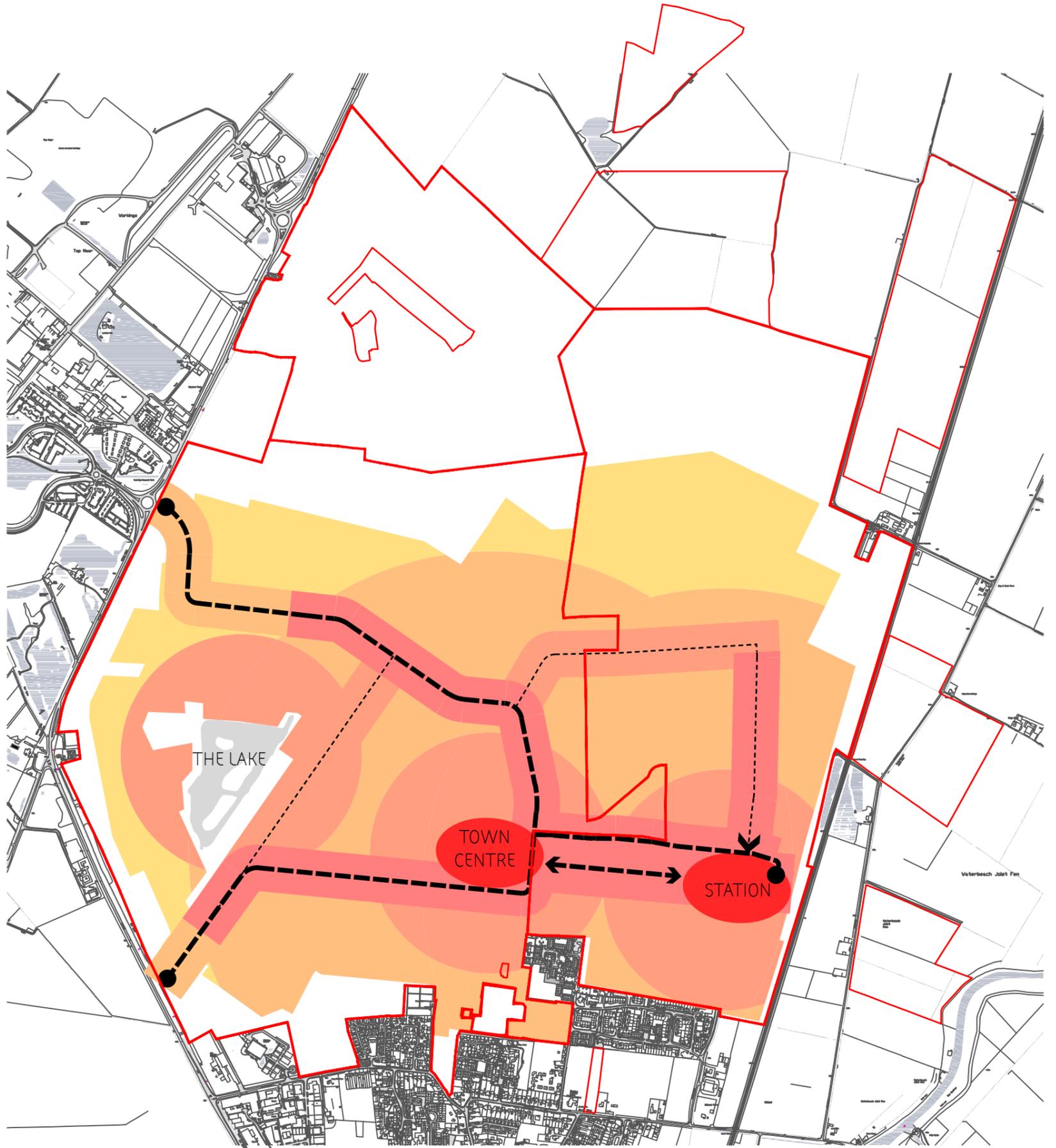
2.1 BLOCK PLAN

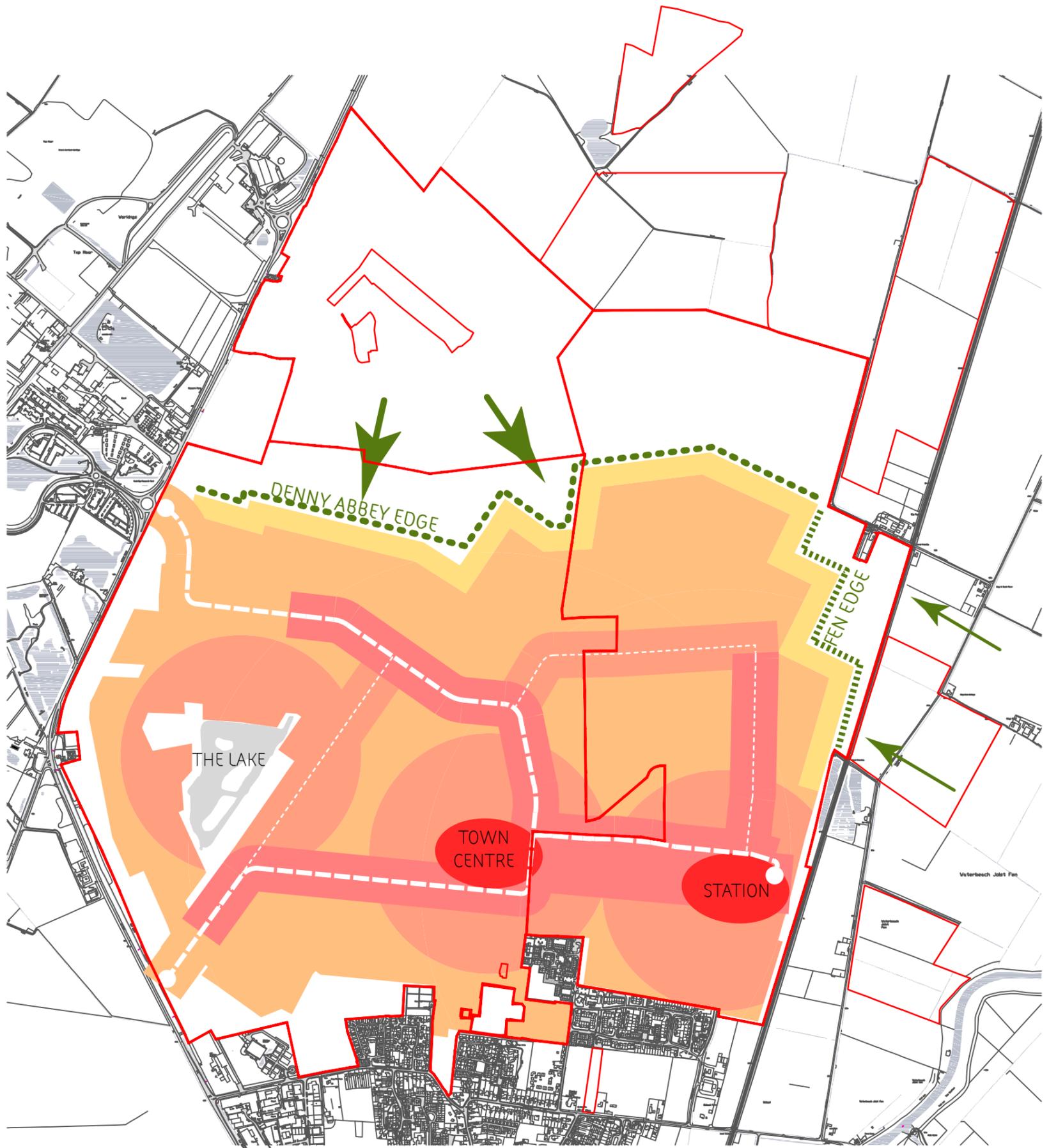


2.2 HIGHER DENSITIES BASED ON SHORT WALKING DISTANCES TO KEY ASSETS



2.3 HIGHER DENSITIES ALONG KEY MOVEMENT CORRIDORS





- The approach allows for a lower density development fringe along the more sensitive northern and north-eastern edges. A 'looser' edge can help to break up the development line visually in response to the landscape edges.

3.0 EMERGING FRAMEWORK

PLAN

This section illustrates an emerging illustrative framework plan for Waterbeach New Town that determines the overall residential capacity of the new town. The plan achieves an equal balance of residential density across landholdings.

3.1 AREA SCHEDULE

	TOTAL
Site Area (Ha)	487
EXCLUSION AREAS	
Strategic Open Space (Ha)	105
Outdoor Sports (Ha)	
Impacts net developable (Ha)	43
Productive landscape (Ha)	
Impacts net developable (Ha)	11
Infrastructure	
Primary Roads (Ha)	10
Secondary Roads/Green corridors (Ha)	28
Barracks Roads (Ha)	2
P&R (Ha)	2
SUDS and community enterprise (Ha)	9
Total (Ha)	62
Schools/ Other Primary land uses	
Primary school 1 (Ha)	3
Primary school 2 (Ha)	3
Primary school 3 (Ha)	3
Primary school 4 (Ha)	3
Secondary school 1 (Ha)	8
Secondary school 2 (Ha)	7
Sixth form (Ha)	2
Total (Ha)	28
NET DEVELOPABLE AREA	
	238
POPULATION	
	26400
	TOTAL
NET DEVELOPABLE AREA	
	238
UNIT NUMBERS	
	11000
DWELLINGS PER HECTARE	
Average dwellings per hectare	46

The development area and capacity of U&C parcels is taken from 'Waterbeach Barracks and Airfield Capacity Study' (August 2016) prepared on behalf of U&C. The final layout will be subject to further design stages.

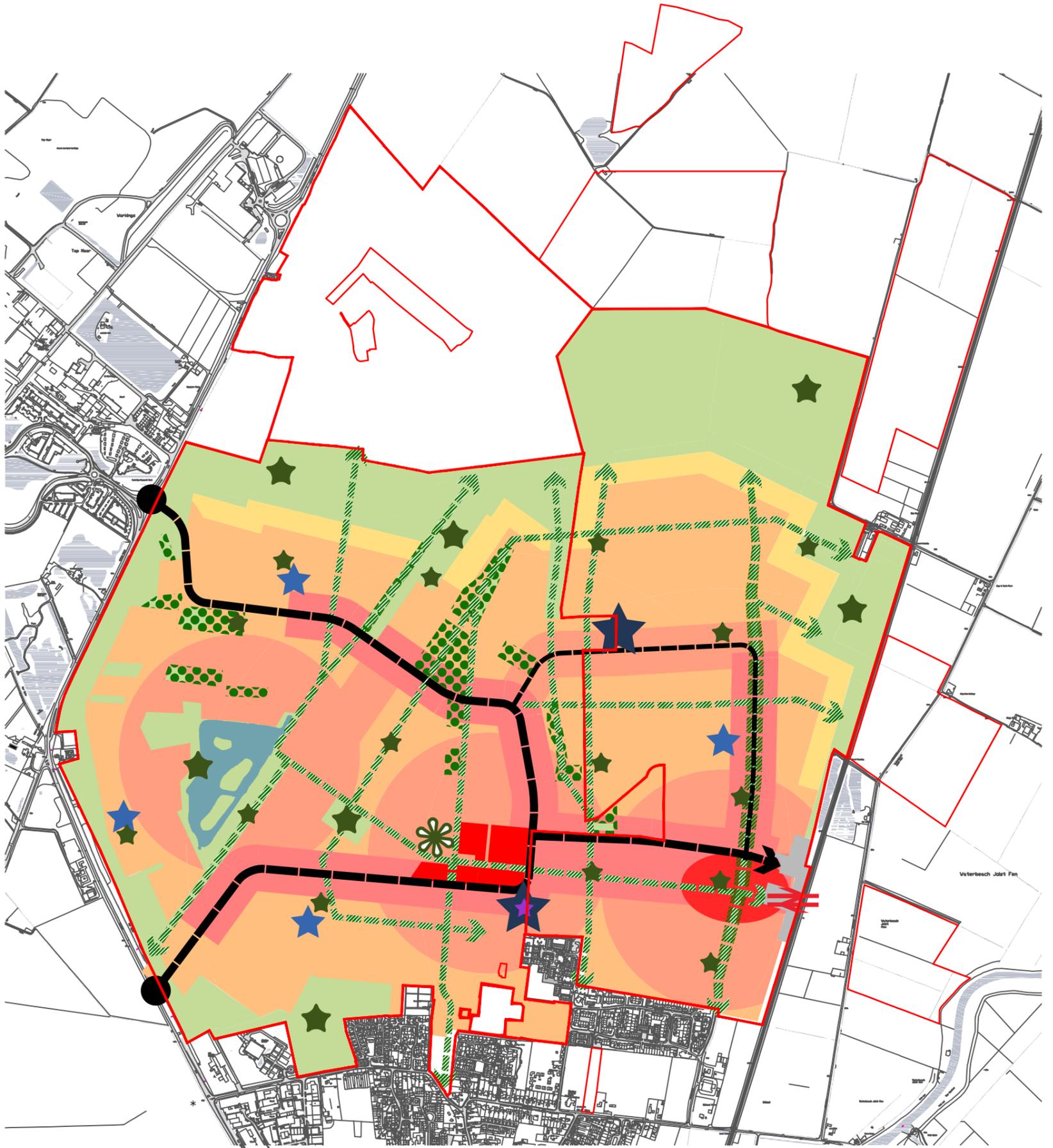
3.0 EMERGING FRAMEWORK PLAN

LEGEND

- PRIMARY ROADS
- KEY SECONDARY ROADS
- PARK & RIDE AND STATION SQUARE
- STRATEGIC OPEN SPACE
- WOODLAND/HEDGES
- FORMAL OPEN SPACE (INCLUDING SPORT AND PLAY)
- TOWN PARK/SQUARE
- PRIMARY SCHOOL



- SECONDARY SCHOOL
- SIXTH FORM
- GREEN CORRIDORS
- RAILWAY STATION
- 80 DPH
- 60 DPH
- 55 DPH
- 45 DPH
- 25 DPH



5.0 DEFINING THE NORTHERN DEVELOPMENT EXTENT

The difference between Development Line A and Development Line B shown on the plan opposite would result in the loss of between 1.5ha to 4.6ha of developable area. In the context of the scale of overall development this is not going to fundamentally effect total capacity. This area of the site sits within the 25 dwellings per hectare zone which theoretically would affect between 37 and 115 homes. If the larger development area were lost then altering the average site wide residential density by less than 1 dwelling per hectare would be sufficient to keep the overall capacity at 11000.

The preferred development extent and an appropriate design response in this area will be subject to much more detailed testing through planning applications and the preparation of the SPD but at this stage should not restrict overall site capacity. Sufficient flexibility should be provided to allow those conversations to take place.

5.0 DEVELOPMENT SCENARIOS

LEGEND

DEVELOPMENT LINE A:

HISTORIC ENGLAND PREFERRED
DEVELOPMENT EDGE LINE

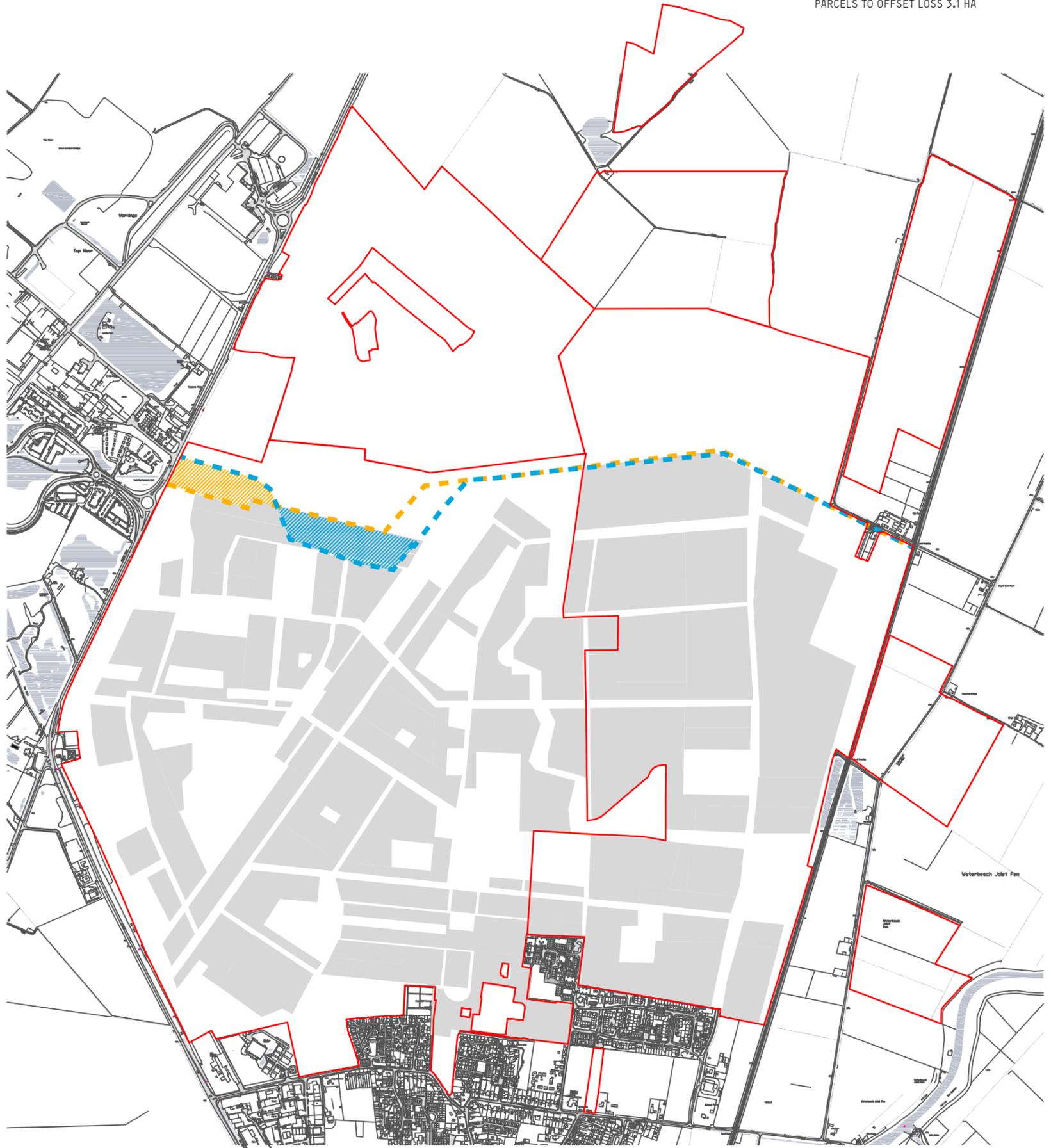
DEVELOPMENT LINE B:

UGC DEVELOPMENT LINE AS PER
WATERBEACH BARRACKS AND AIRFIELD
CAPACITY STUDY (AUGUST 2016)

DEVELOPMENT PARCELS AS PER
WATERBEACH BARRACKS AND AIRFIELD
CAPACITY STUDY (AUGUST 2016)

DEVELOPMENT PARCELS ENCROACHING
ON AGREED HISTORIC ENGLAND EDGE
LINE 4.6 HA

POTENTIAL LAND FOR DEVELOPMENT
PARCELS TO OFFSET LOSS 3.1 HA

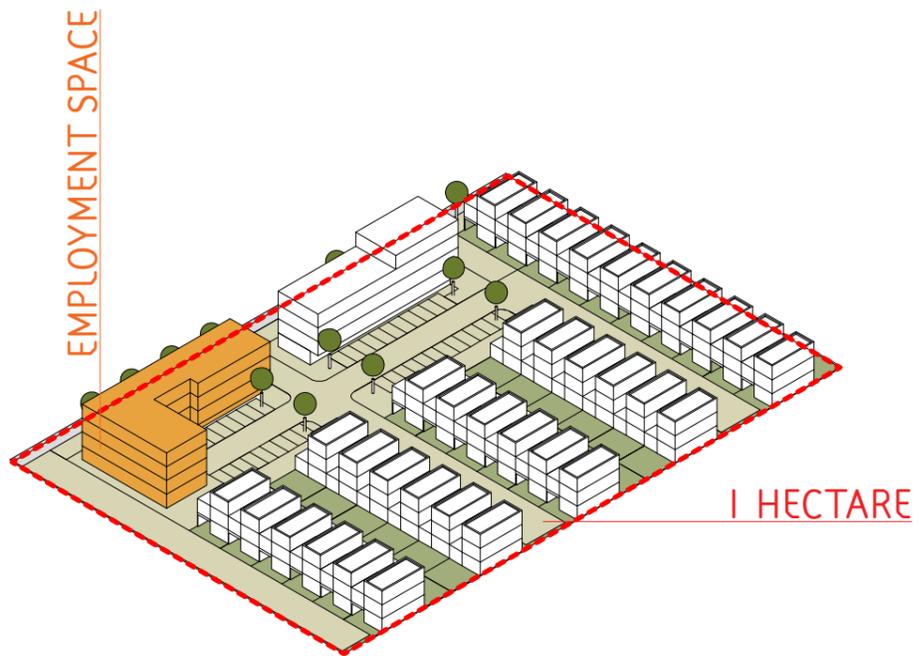


6.0 INTEGRATING EMPLOYMENT

The strategy for employment space at Waterbeach New Town is not to plan for large-scale employment parks like the Cambridge Research Park but to provide a much finer-grained and flexible mix of employment hubs, workshops, offices, mixed in with housing and other uses, but with particular concentrations in the town centre and close to the rail station. This approach is consistent with the strategy set out in employment paper prepared by DLA on behalf of U & C.

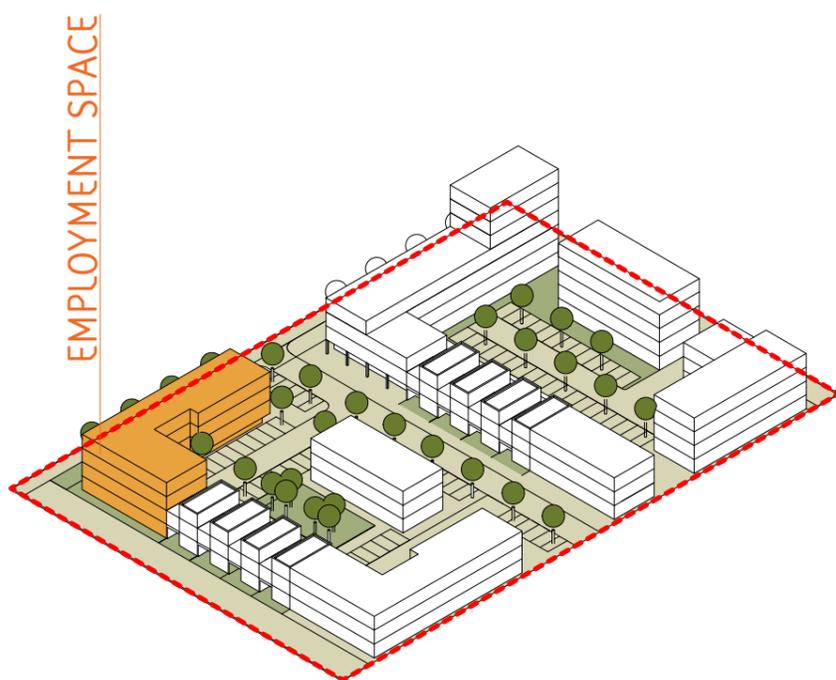


60 DWELLINGS PER HECTARE & 1500SQM EMPLOYMENT SPACE



- Possible scenario for integrating employment space into a 60 dwellings per hectare block.
- Employment parking to be screened to the rear/ on street.

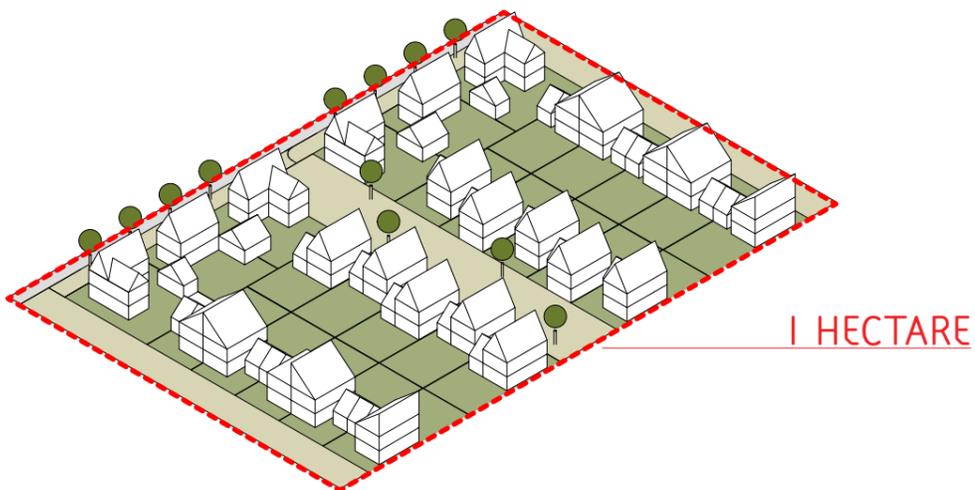
80 DWELLINGS PER HECTARE & 1500SQM EMPLOYMENT SPACE



- Possible scenario for integrating employment space into a 80 dwellings per hectare block.
- Employment parking to be screened to the rear/ on street.

6.1 RESIDENTIAL DENSITY EXAMPLES

25 DWELLINGS PER HECTARE



- Low density development.
- Detached and semi-detached housing arranged in clusters and streets.
- Variable building line to help break down massing.
- Parking on-plot.
- Used along to the edges of development to offer transition into surrounding landscape.



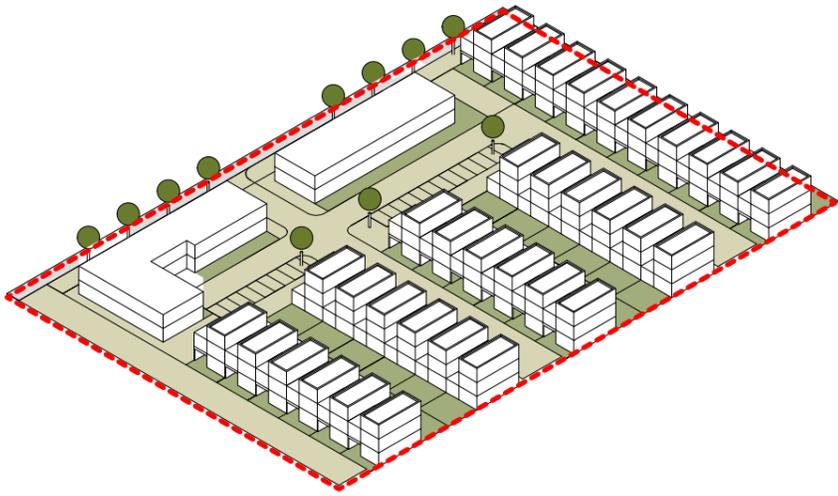
45 DWELLINGS PER HECTARE



- Medium density development.
- Some semi-detached units intermixed with short rows of terraced housing.
- Mixture of on-plot side parking/integral garages for larger units with some on street parking located along side streets.
- Generally used within urban blocks as a transition between low and high density areas.
- Intermixed with small scale green spaces and squares.



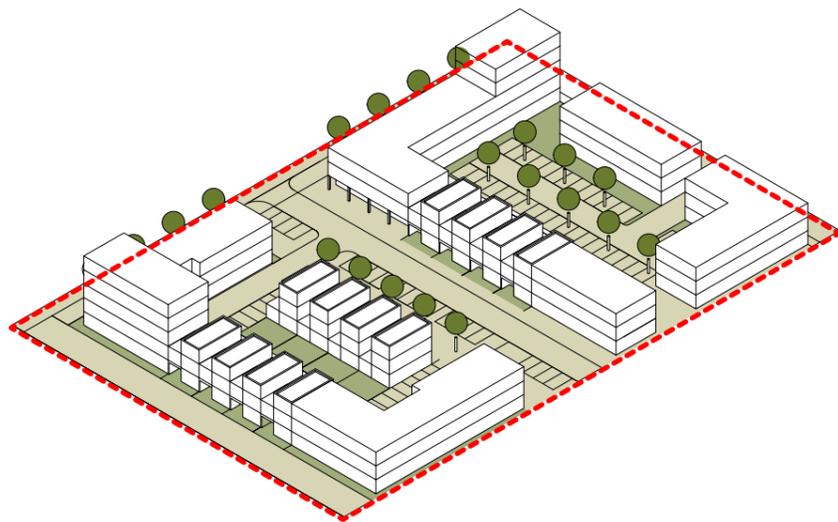
60 DWELLINGS PER HECTARE



- High density development.
- Predominantly terraced housing of medium to long spans with inclusion of apartment blocks in key locations.
- Terraced housing to have integral garages, on street parking or small side courtyards. Apartments to have court/rear parking.
- Used in areas within close proximity of the Town Centre, Railway Station and Lake.

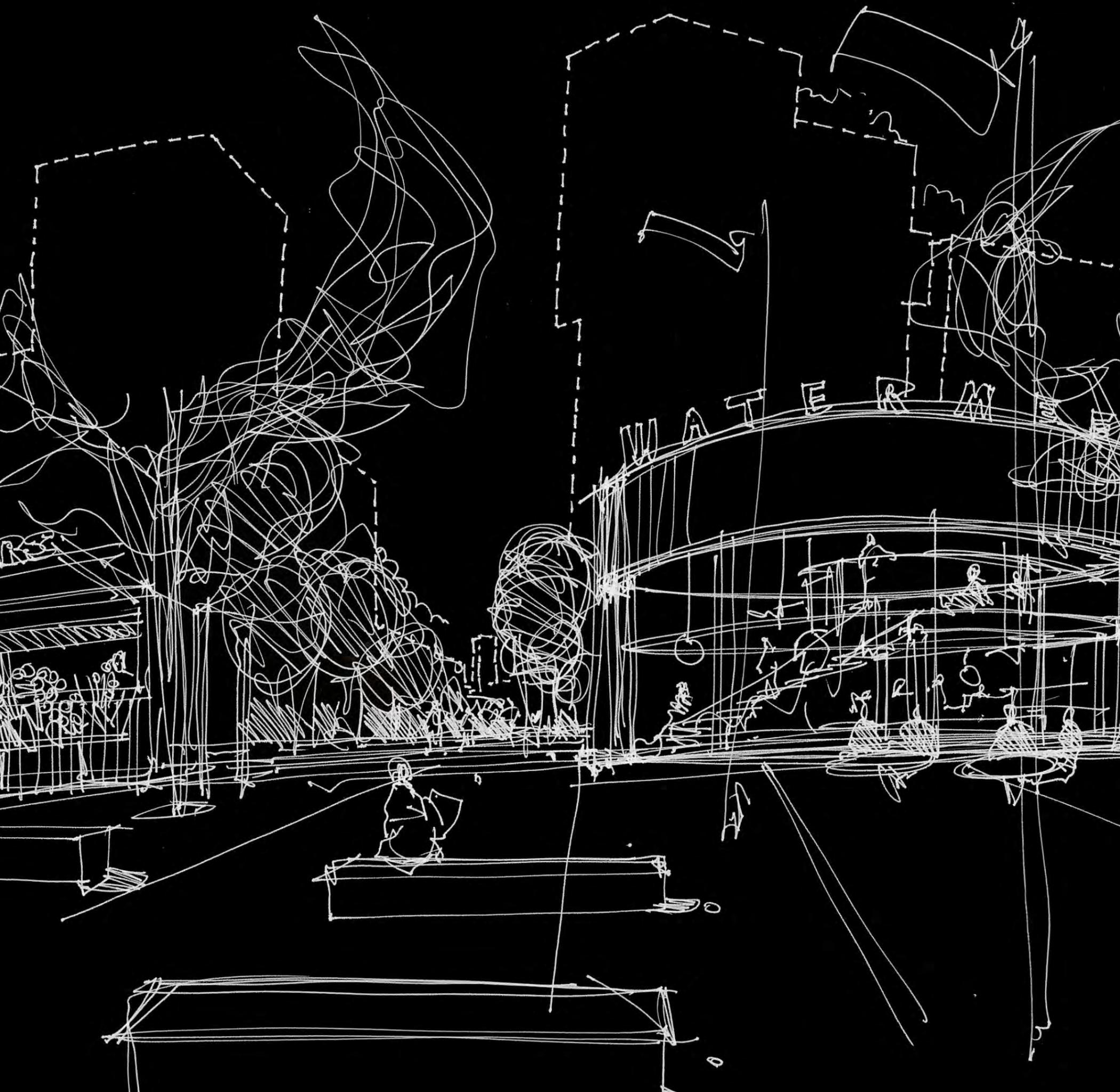


80 DWELLINGS PER HECTARE



- Highest density development around key site uses.
- Predominantly apartment blocks with some terraced units along quieter mews/lanes.
- Opportunities for a mix of community and retail uses at ground floor level along Primary and Secondary Streets.
- Apartment parking tucked within courtyards as part of high quality landscape treatment.
- Used around areas of intense activity i.e. Town Park and train station.





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