

Illustrative roof plan of overall scheme

9 Illustrative studies

The following illustrative studies explain the design principles underlying the outline masterplan on a plot by plot basis. In particular, detailed drawings and illustrations are provided that suggest how that part of the Redevelopment scheme that is being submitted in outline might be translated into a built form and how the spaces created between buildings might be experienced.

The purpose of the studies is not to dictate a particular design style, but to give an indication of the possibilities associated with the proposed development. The principles outlined in the following section confirm the application's commitment to high quality design and to establishing the basis for future design work related to the Site.



Photograph of model looking at residential area and park

9.1 Residential area (Plot J-Q)

Brief

The following documents and expert advice have influenced the design and set the proposed unit and tenure mix:

- 1. BRW SPD
- 2. Policy Advice Note: Garden City Settlements (produced by the TCPA, with support from English Heritage)
- 3. Client brief prepared by Savills Development Consultancy

The masterplan's aspirations are to address the SPD requirements by delivering a scheme that achieves the following:

- makes sufficient provision for the local community
- respects the context of the listed buildings
- provides for open space and landscape
- creates permeable block layouts
- respects the Garden City design principles, sustainable design and enhancement of links to and from the Site.

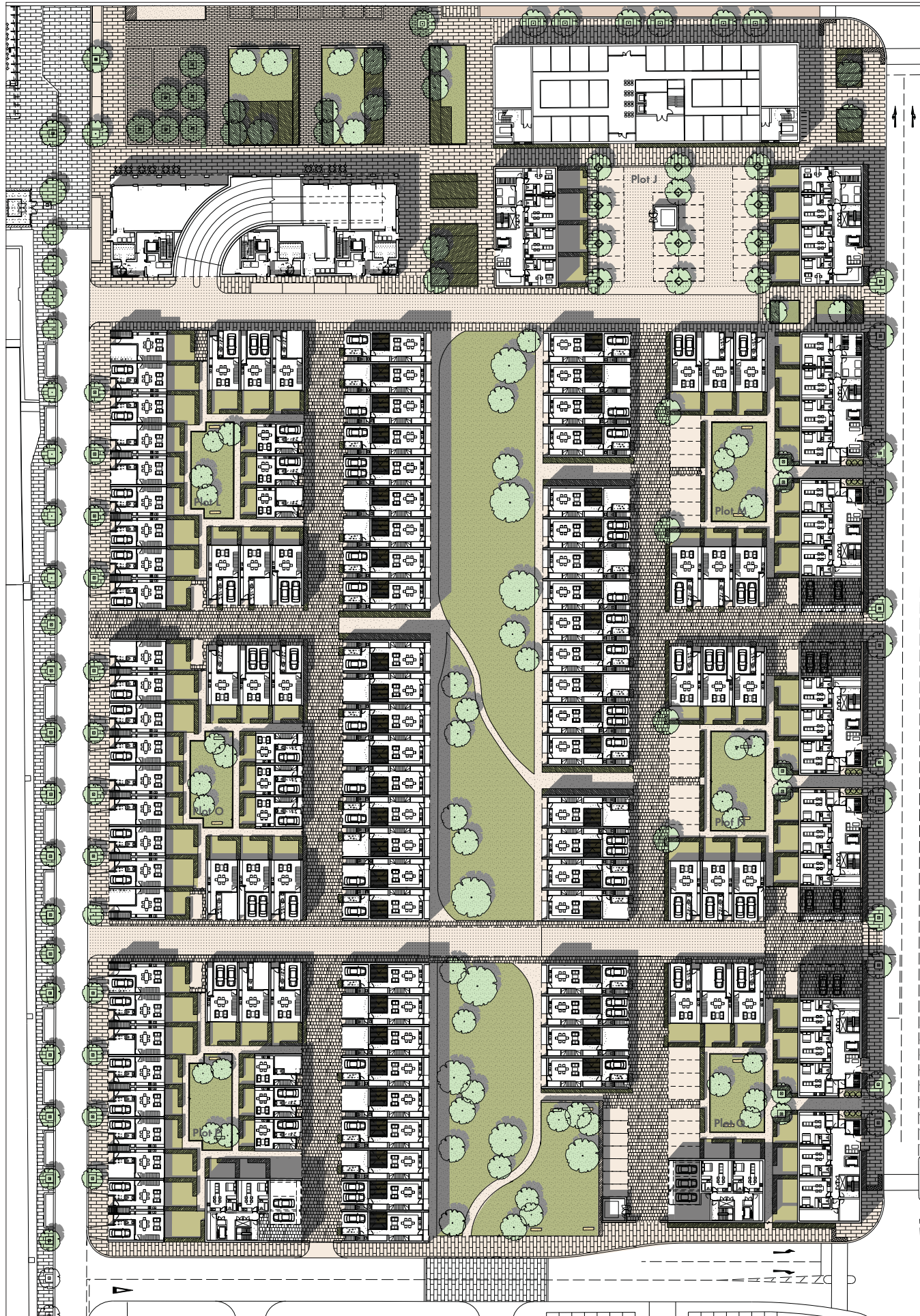
The proposals will create a new residential community fully integrated into the wider contexts, bringing together the proposed development to the south and the proposed commercial district to the north.

The proposals are based on a grid form creating a hierarchy of streets, public, semi public and private spaces.

Expert advice from Savills suggested a strong demand for family housing. They have acknowledged the need for high density development proposed in the form of well-planned townhouses rather than apartments.

The Welwyn Garden City policy for affordable housing is 30% and the illustrative scheme indicated in section 9.3 shows how the tenure mix is allocated across the Site.

The illustrative scheme comprises 344 residential units in total.



Illustrative plan of the residential area

The Layout

The residential parameters are set up to allow for a high density development that nevertheless fully embraces the principles and aspirations of the BRW SPD and the Policy Advice Note: Garden City Settlements, thereby creating a new sustainable neighbourhood that forms part of a wider masterplan and adjoining development plans.

The layout comprises a full range of residential typologies as will be discussed in the following section. These typologies are then arranged around a hierarchy of streets and open spaces.

The busy roads to the east and south are flanked with apartment units providing the mix of units required whilst also screening the public and private open spaces from these roads.

Shared garden spaces, behind apartment blocks, are then flanked by smaller secondary mews streets. These mews streets allow access to smaller duplex units to the north and south. By keeping the height of the houses to a set minimum, it is intended to maximise the sunlight provision in the shared garden courtyards. These courtyards also provide the LAP spaces for young children's play.

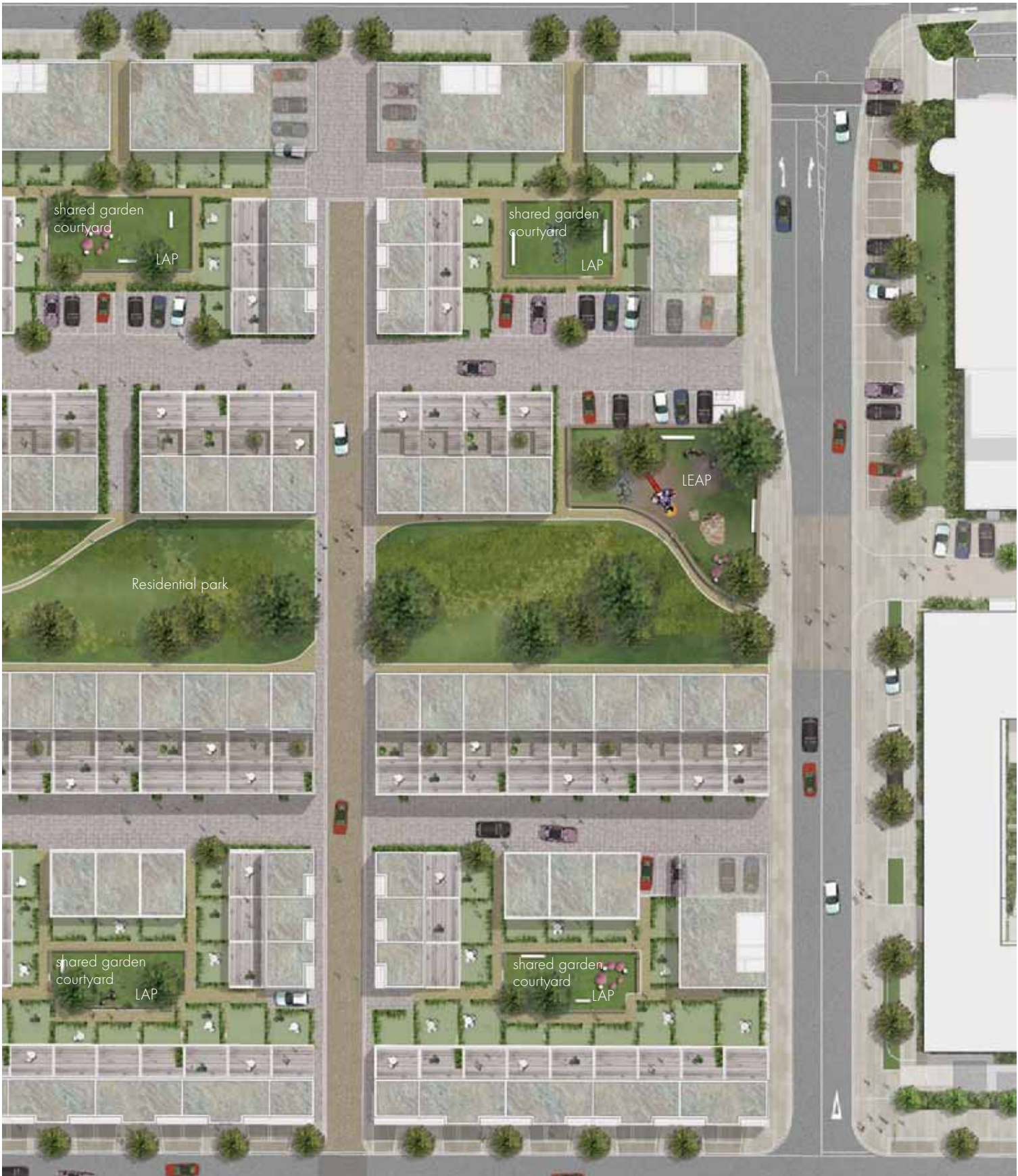
All ground floor units will have access to private gardens.

Access to the residential neighbourhood is from within the Redevelopment to the east and south. No access is possible directly from Broadwater Road - in line with the BRW SPD. The two roads that cross the residential grid (east-west) provide access to secondary mews streets and individual houses.

The residential development is focused around the large residential park providing a link between the listed buildings, the town centre whilst linking neighbourhoods away from busy roads, and providing public open space.

It is important to form a strong urban edge to this park with direct access to the facing town houses. The park also provides a LEAP at the south- eastern end serving to enhance the visual link to the listed structures.

The layout also maximises the potential for active frontages as the front rows of the three storey houses address the linear park and overlook the public space.



Illustrative landscape plan of the residential park and shared garden courtyards



Illustrative allocation of private and affordable units

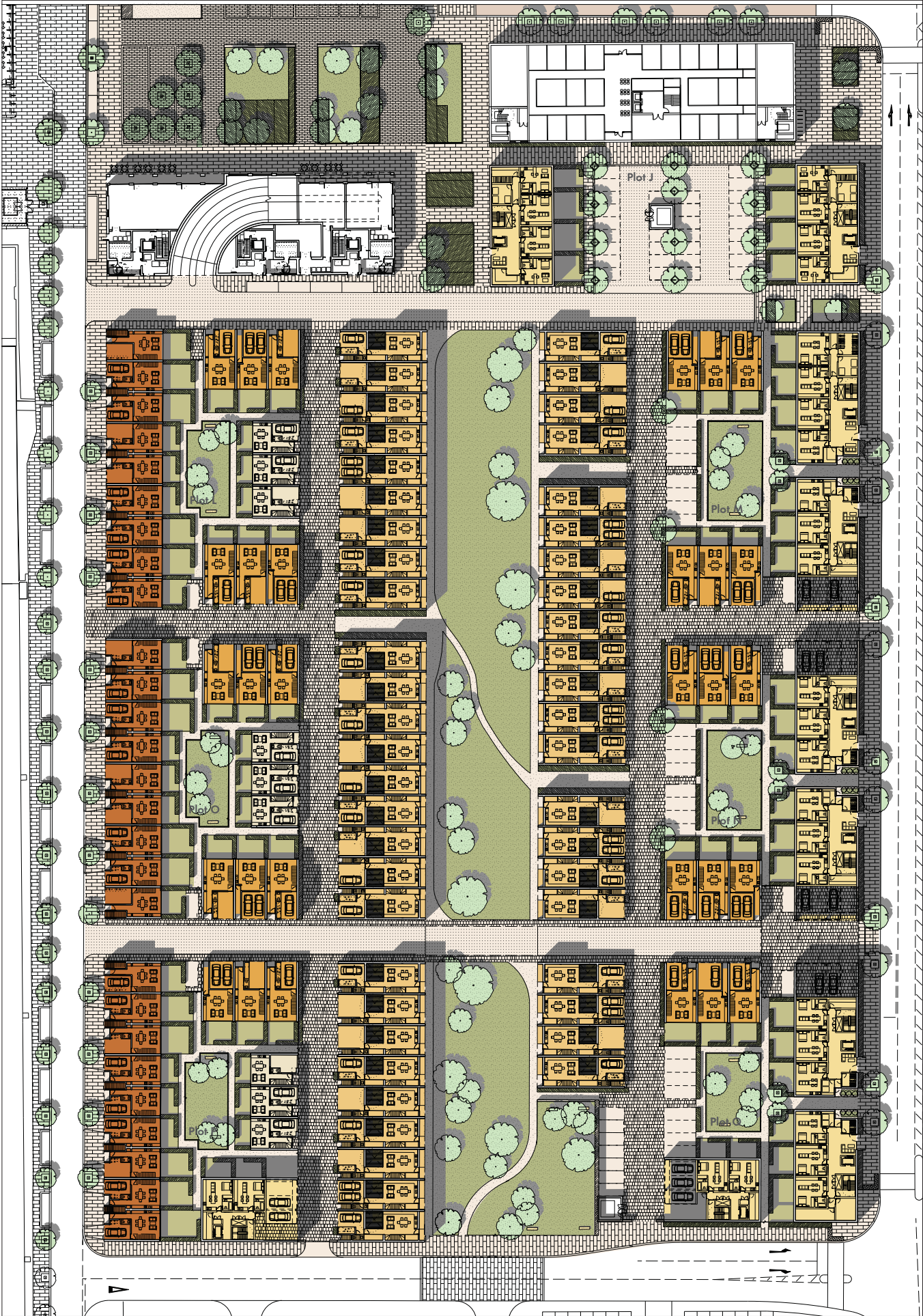
9.1 Residential area (Plot L-Q)

Affordable and Private Units

The parameter plans and illustrative layout provide a fully integrated tenure mix with a variety of unit sizes across the Site. We have demonstrated an illustrative proposal of tenure mix which can be more carefully developed in the future in light of local needs.

The Site will provide 30% affordable units.

- Indicative affordable unit allocation
- Indicative private unit allocation

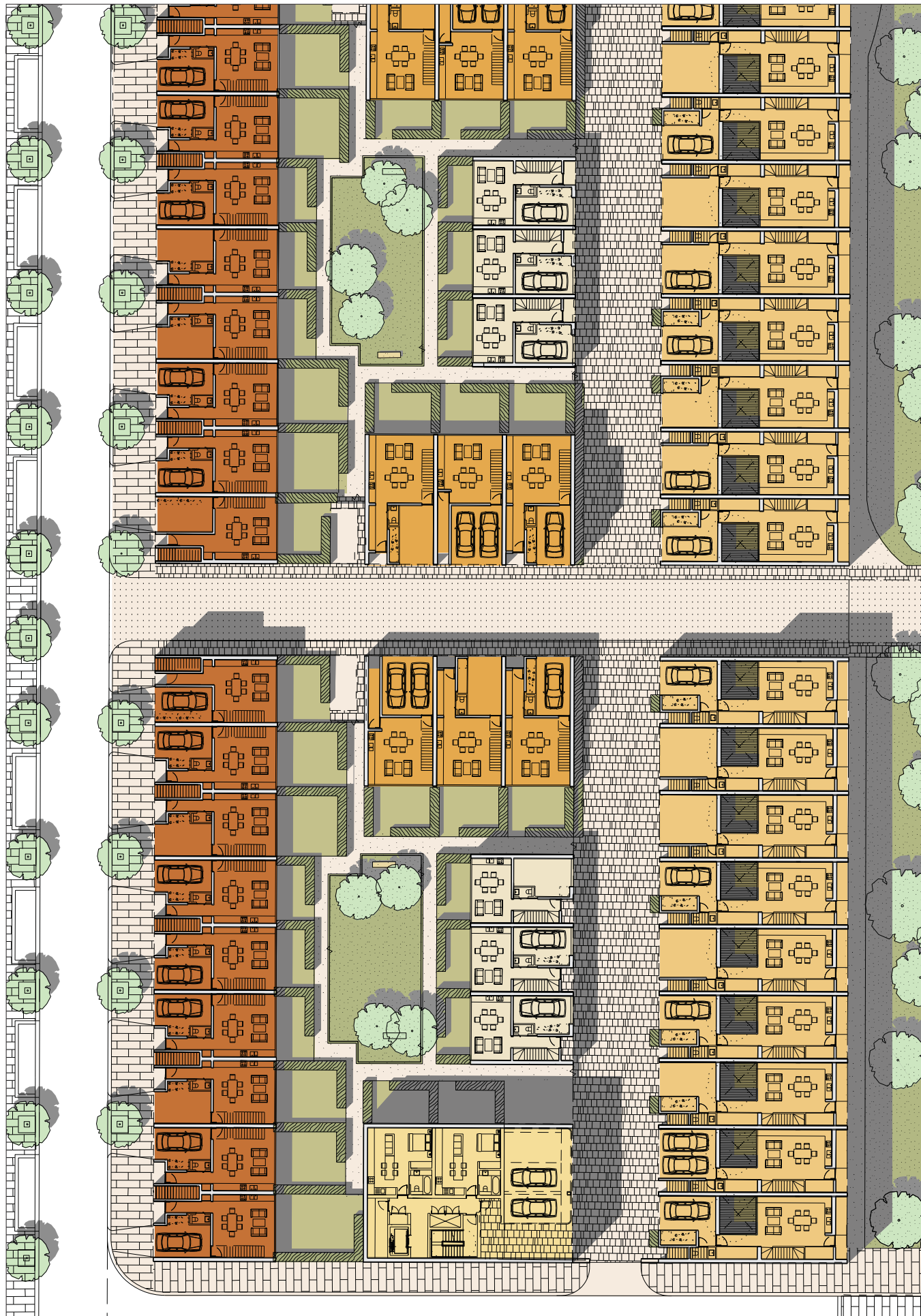


Illustrative unit distribution

Unit distribution across the Site

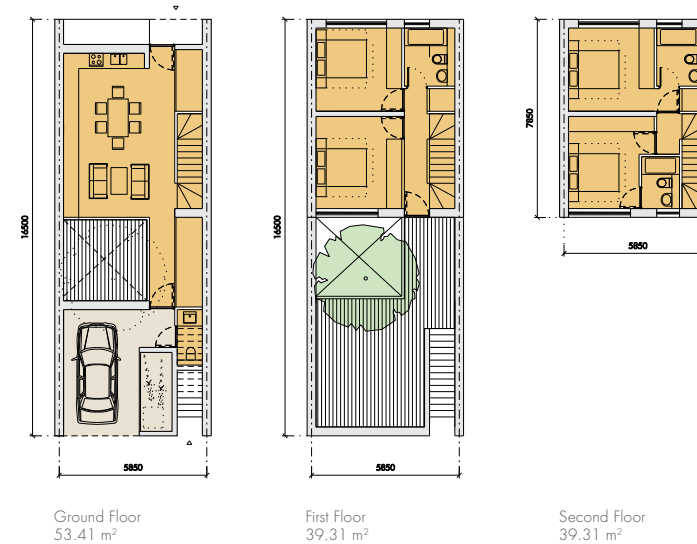
Residential unit mix											
Apartments	TYPE	NIA (sqm/sqft)	J	K	L	M	N	O	P	Q	Total
	1 bed	50.50/ 538.33	28	12	-	15	22	-	4	26	
Houses	2 bed	70.00/ 747	10	24	-	20	16	-	5	21	
			38	36	0	35	38	0	9	47	203
Houses	2 bed	74.11/ 790	-	-	3	-	-	3	3	-	
	2 bed maisonette	86.87/ 926	-	-	18	-	-	18	18	-	
	3 bed	120.13/ 1281	-	-	6	6	6	6	3	3	
	4 bed	132.03/ 1408	-	-	9	9	8	9	9	4	
TOTAL			0	0	36	15	14	36	33	7	141

Summary unit mix



Illustrative courtyard arrangement and unit distribution

Typologies



4-bed town house



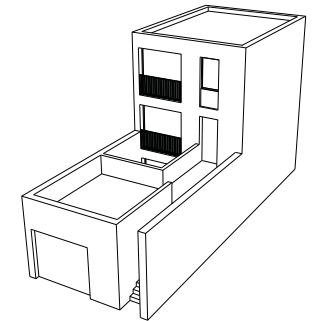
3-bed town house

Courtyard Townhouses

These larger family houses are arranged over three floors with a main entrance from the residential park while the back door and car parking is accesses from the mews street to the rear.

The deep plan provides potential for a courtyard in the centre of the house. This courtyard provides private and secure family amenity space at ground level. A larger amenity space is also offered over the integrated garage to the rear of the property.

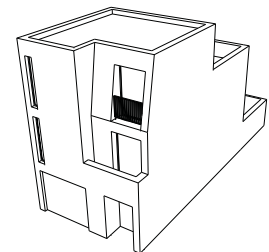
These houses will form the primary face to the residential park. Facades should not set back from the property boundary. The main entrance, however, is set back allowing for covered and semi-private landscaped space at the front door.



Mews Houses - 3 bedroom

Larger mews houses face each other across the quiet east-west mews streets, and back onto the shared garden courtyards.

These houses are arranged over three floors with car parking incorporated within their individual footprints. All have private gardens with direct access to the shared garden courtyard. Upper levels also offer the opportunity for roof terraces.



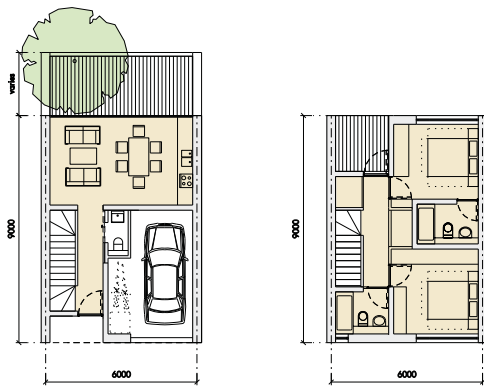


Upper Floors
1 Bed Apartment= 50.50m²= 538.33sqft NIA
2 Bed Apartment= 70.00m²= 747 sqft NIA



Ground Floor Studio Apartment
35.50 m²

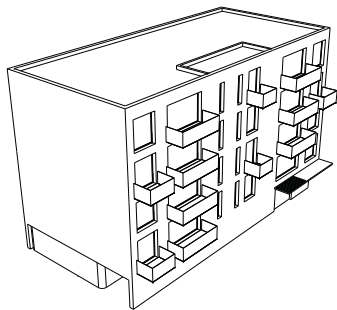
Apartment blocks



Ground Floor
31.92 m²

First Floor
42.19 m²

2-bed town house



Apartment blocks

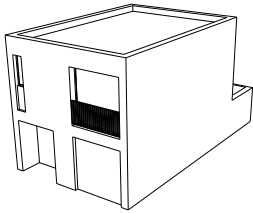
The flats are arranged over 4 and 5 floors containing smaller 1 bedroom and 2 bedroom units.

The ground floor has naturally-lit entrance lobbies. Bins and cycle storage is located at ground level. The 1 bedroom studio units are accessed directly of the lobby and have private, ground level amenity spaces.

The blocks minimise corridors and maximise dual aspect living, from which all 2 bedroom units benefit.

Typical floors have two 2 bedroom units and two 1 bedroom units arranged around a single core. The core is naturally-lit and ventilated at all levels.

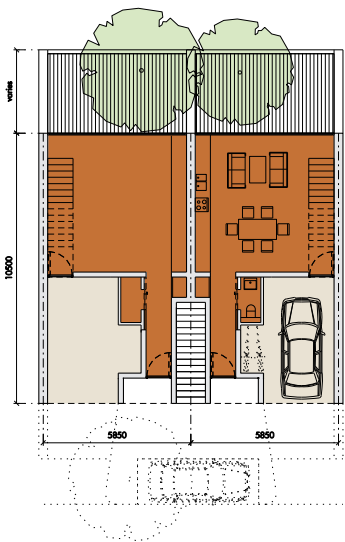
All units have access to private amenity space or balconies.



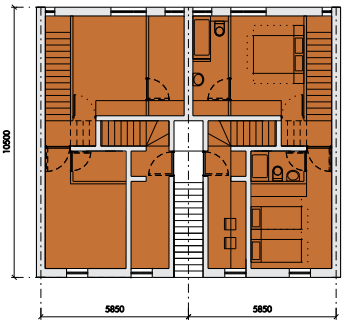
Mews Houses – 2 bedroom

The front doors to these smaller mews houses face the secondary north south orientated streets. They back onto the communal shared garden courtyard to the east and west.

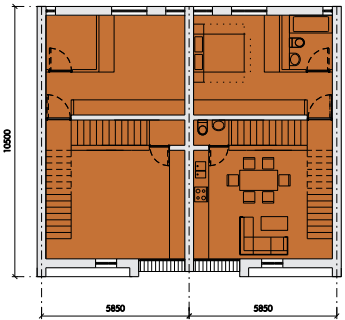
These houses are arranged over two floors with car parking incorporated within their individual footprints. All have private courtyard gardens with direct access to the larger, shared garden courtyards. Upper levels also offer the opportunity for roof terraces to the rear.



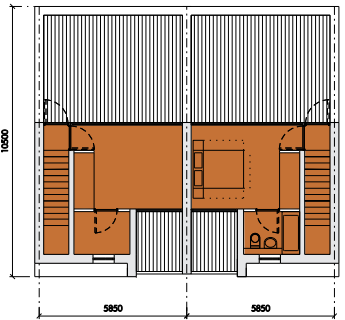
Ground Floor
38.92 m²



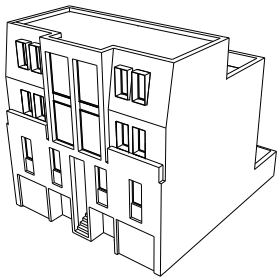
First Floor
35.05 m²



Second Floor
53.19 m²



Third Floor
26.52 m²



2-Bed Maisonnées

The west boundary of the Site is lined with 2 bedroom maisonette houses arranged over four floors. The ground and first floor units provide integrated car parking with direct access to private courtyard gardens as well as the communal shared garden courtyards.

The upper two levels are accessed by a stair directly from ground level. These units will also have access to a roof terrace at upper level with stair access from living areas. On the upper two levels the arrangement can be flipped, placing living accommodation at upper level with direct access to the roof terrace and bedrooms at the lower level.

2-bed maisonettes

Residential street typologies

Residential streets and building edges

The following sections provide illustrations of the residential streets, external spaces and building frontages. The aim of these diagrams is to offer guidance on key dimensions, heights and widths, and strategies to prioritise pedestrians and cyclists.

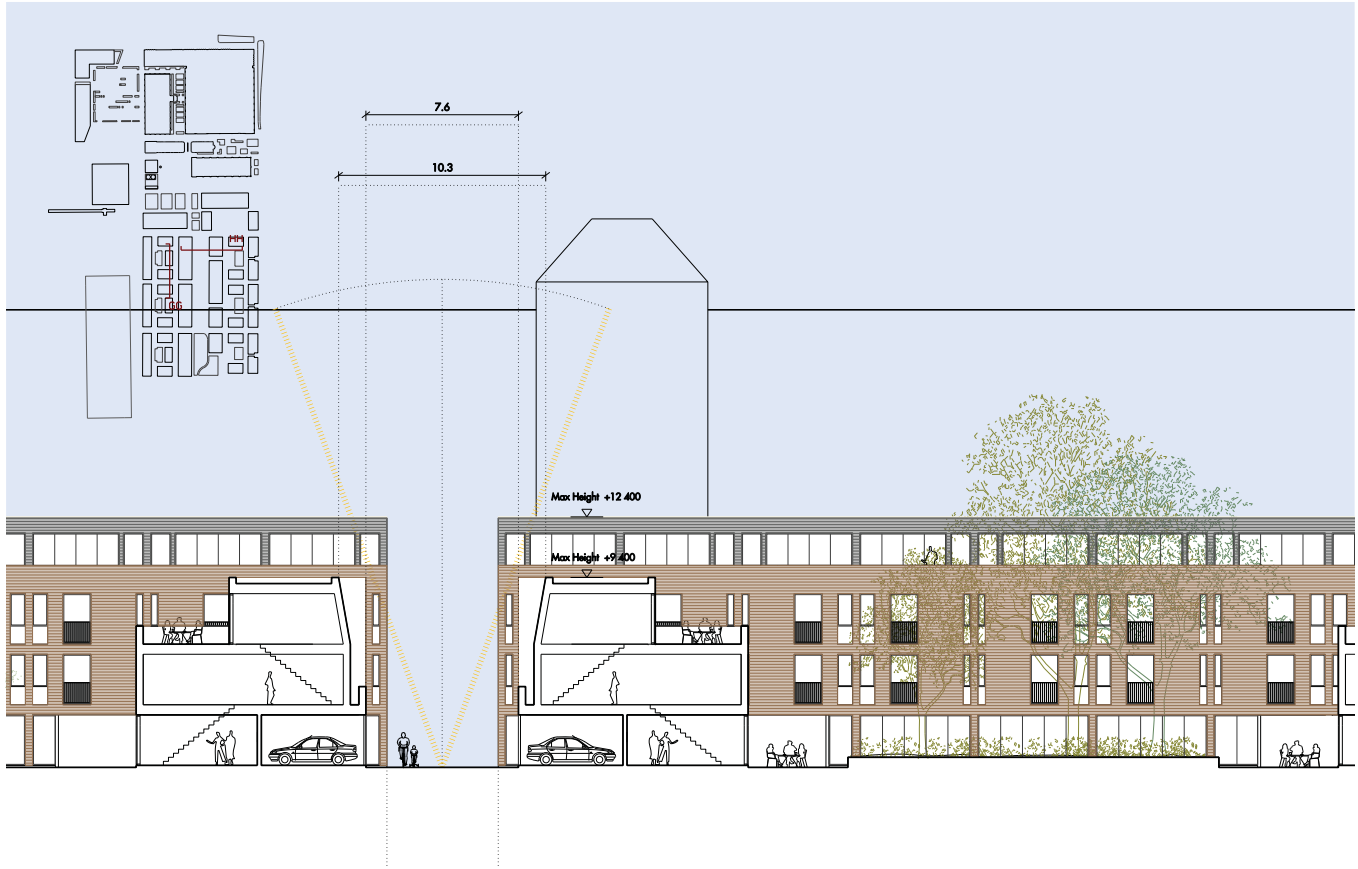
Public buildings framing external spaces such as the recreation ground, the Civic Square should promote permeability at street level, in order to enhance the sequence of pedestrian movement through the Site by providing covered routes between external spaces, and level access from pavement grade throughout.

Residential streets are scaled to reflect their more private, domestic character. In addition to key dimensions, the illustrated sections offer guidance on the design of entrances, recesses, set-back and raked upper storeys in order to provide relief to the facades and to increase admission of natural daylight to street level. Public amenity spaces are also illustrated and make reference to planting, landscaping that will enhance the development.

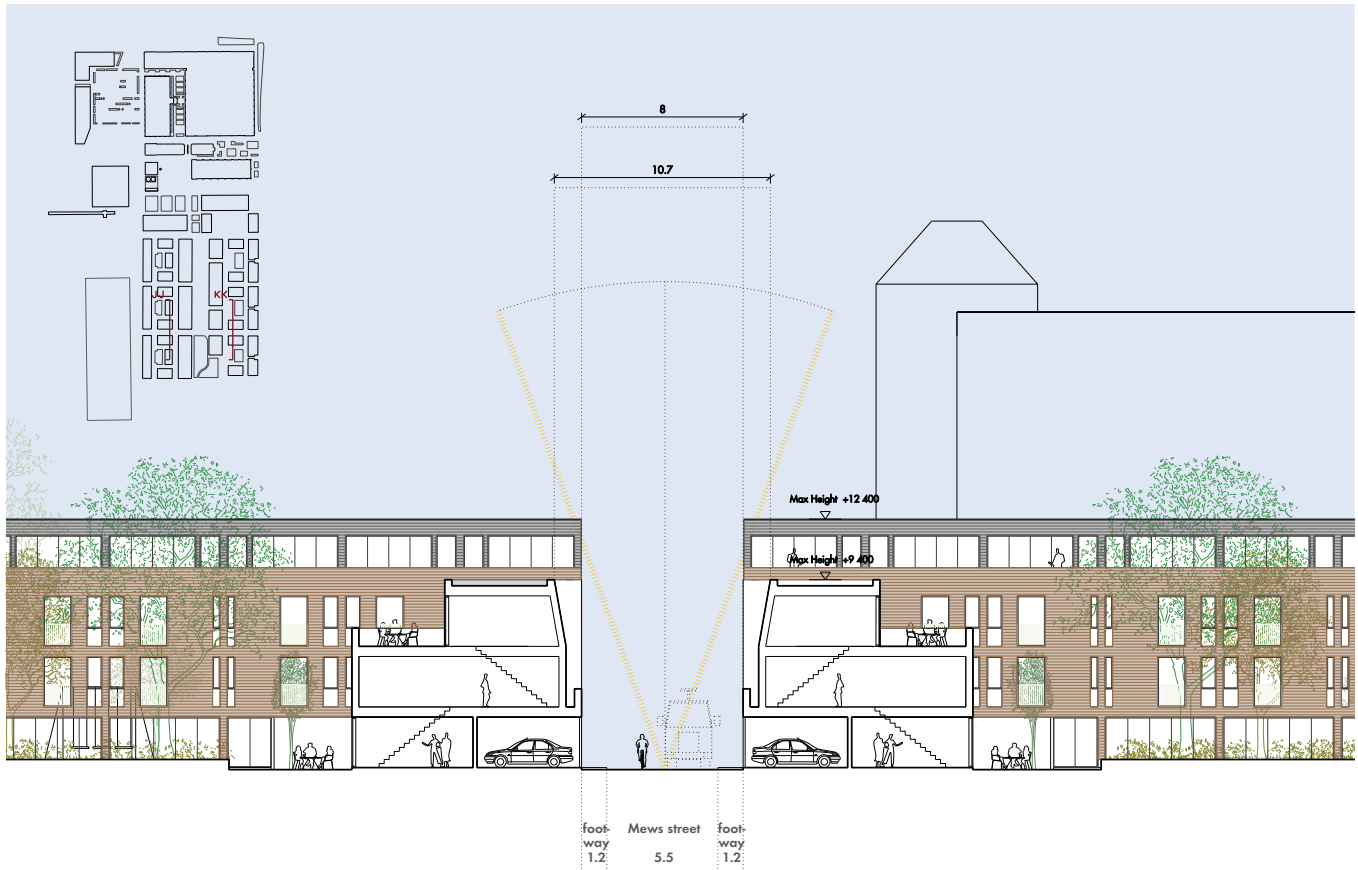


Sketch view looking into a shared garden courtyard

9.1 Residential area (Plot L-Q)



GG Residential mews



JJ Main access road into the residential site

Residential Mews (section GG)

- Approximately 8m overall street width at ground level
- Maximum building height of 9.4m.
- Storeys above street level set back by approximately 750mm.
- Top storey set-back/raked.
- Openings to be designed and positioned to avoid overlooking and compromising privacy.
- Daylight/sunlight to be further considered when openings are designed.
- Rear of units to provide private amenity/garden space with direct access to shared courtyard.
- Car and cycle storage to be included within the footprint of the dwelling.
- Bins/recycling storage to be integrated with the design of the dwelling to avoid bins being left outside front door or in public spaces.
- Gas, water and electricity meter boxes to form part of the design of the entrance canopy to avoid unsightly exposed plastic covers on facades.
- Roof spaces to be exploited for private amenity space.



Accordia, Cambridge, PLB Studios

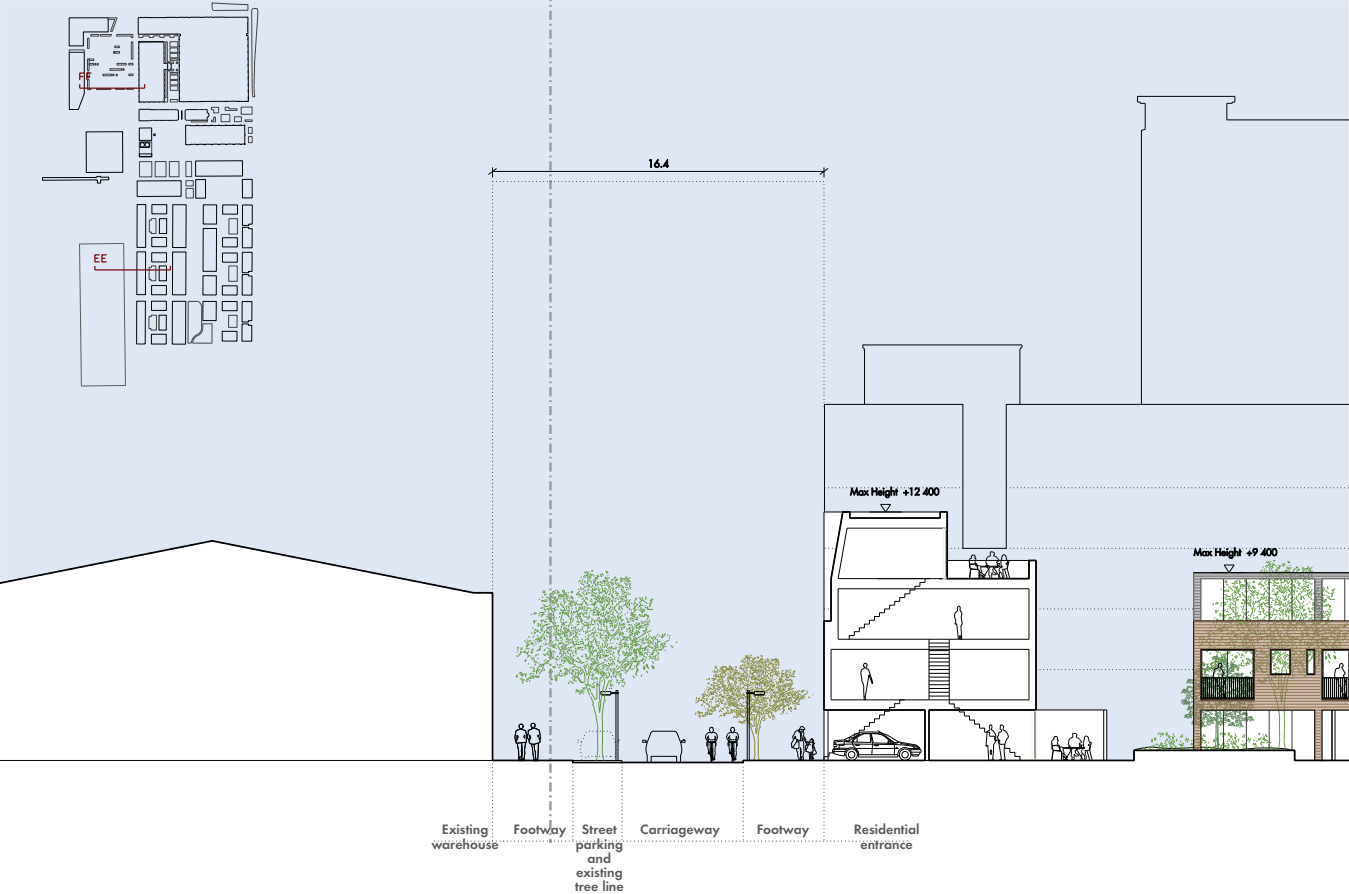
Main access road to the residential site (section JJ)

- Street width to be a minimum of 8m wide.
- Footway to be at least 1.2m.
- Setting back of upper levels.



Holland Park Mews

9.1 Residential area (Plot L-Q)



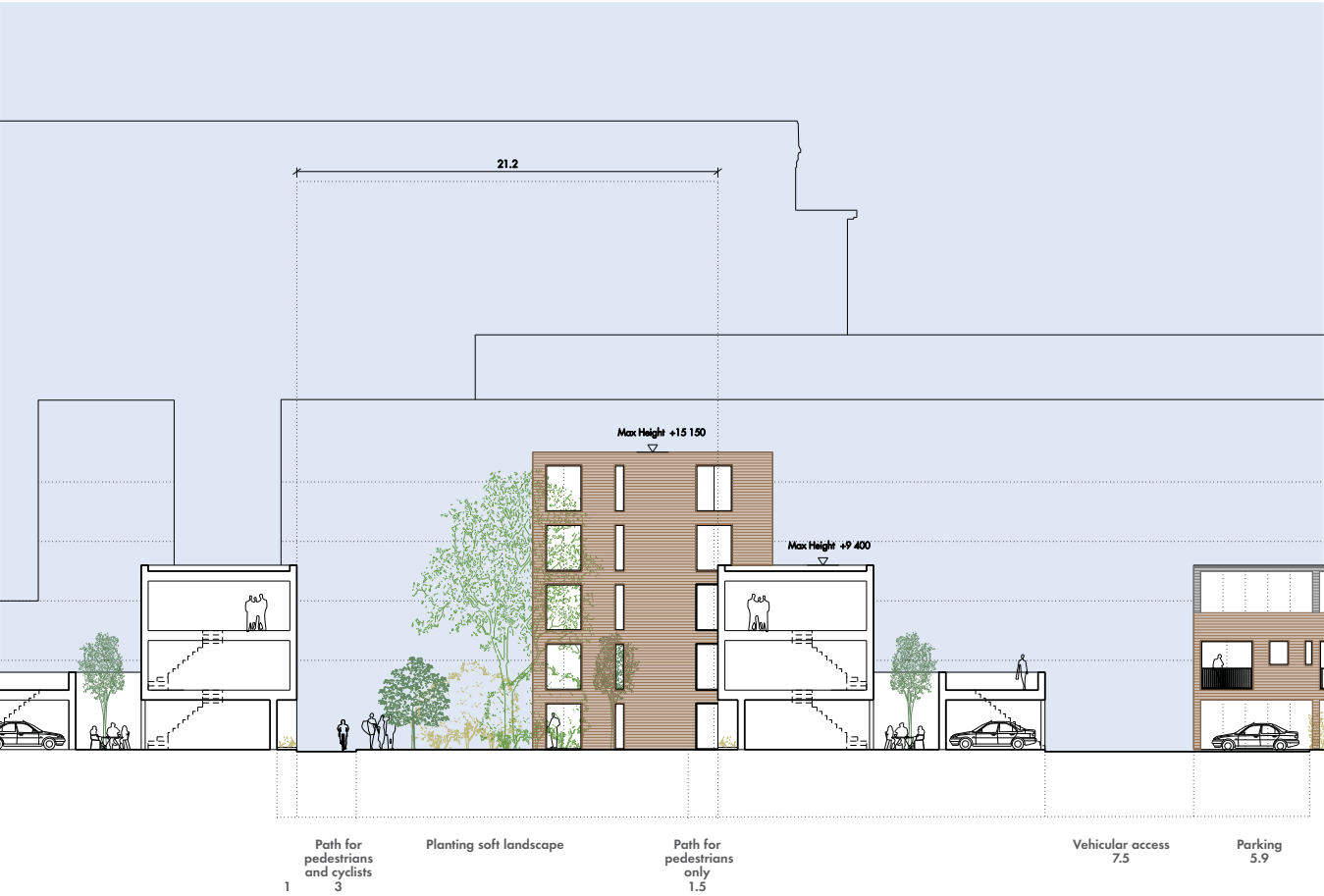
EE Internal north south boulevard

Internal north south Boulevard (section EE)

- Approximately 16.5m overall street width
- two 4m wide footways, 2.4m on-street parking, and 6m wide carriage way
- This road should be tree-lined
- 12.4m maximum height of houses (4 stories)
- Possible set-back to the upper two levels



Accordia, Cambridge



HH Residential Park

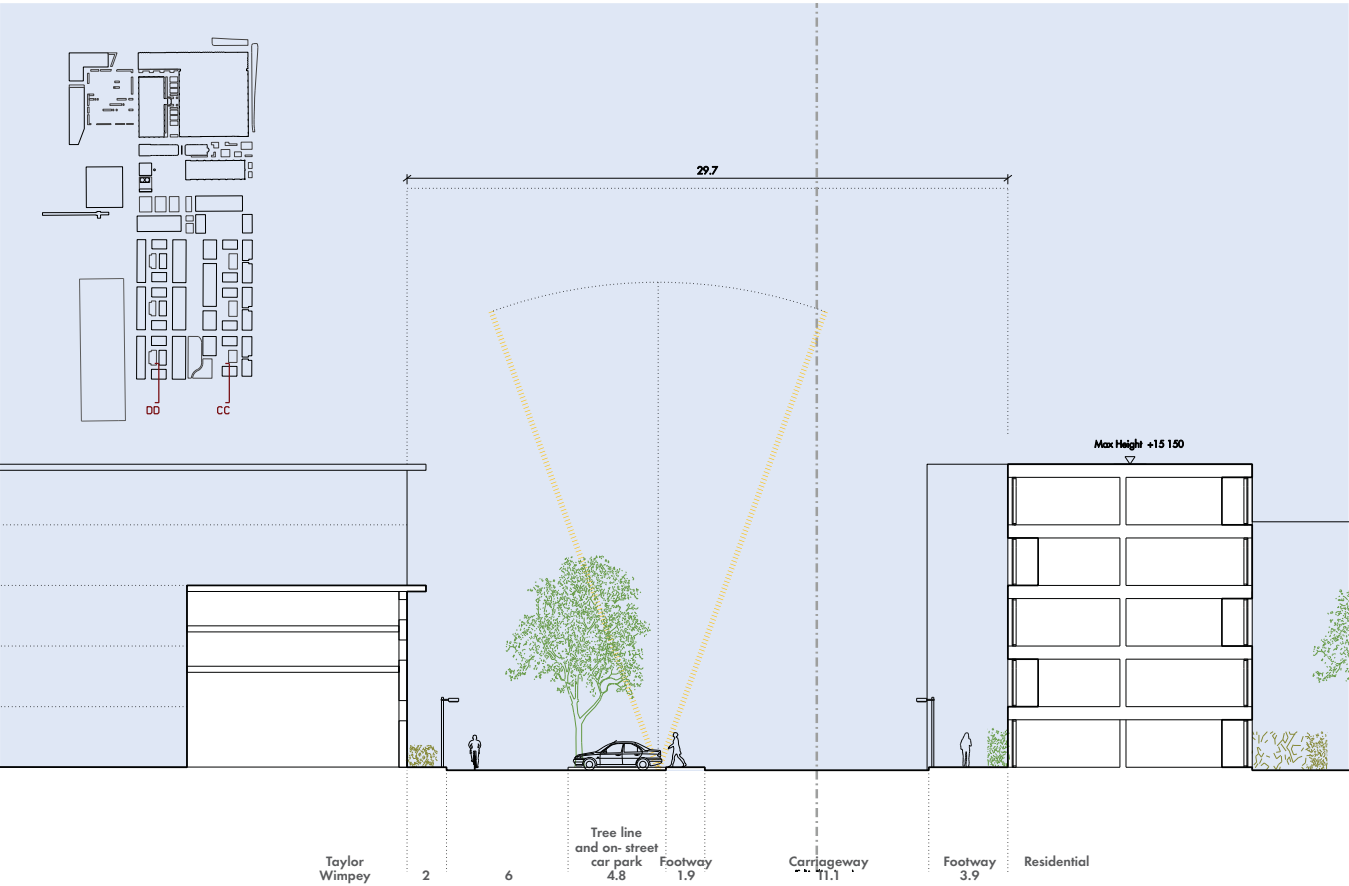
Residential Park (section HH)

- 21m minimum width
- Street faced by 3 storey courtyard town houses (9.4m tall)
- 3m wide pedestrian and cycle route
- Town house entrances to be directly off the park with recessed front doors and a meter wide planted zone
- Private amenity space to be provided around courtyards and on low level roof spaces
- All car parking, bins and bikes to be integrated within the footprint of the house

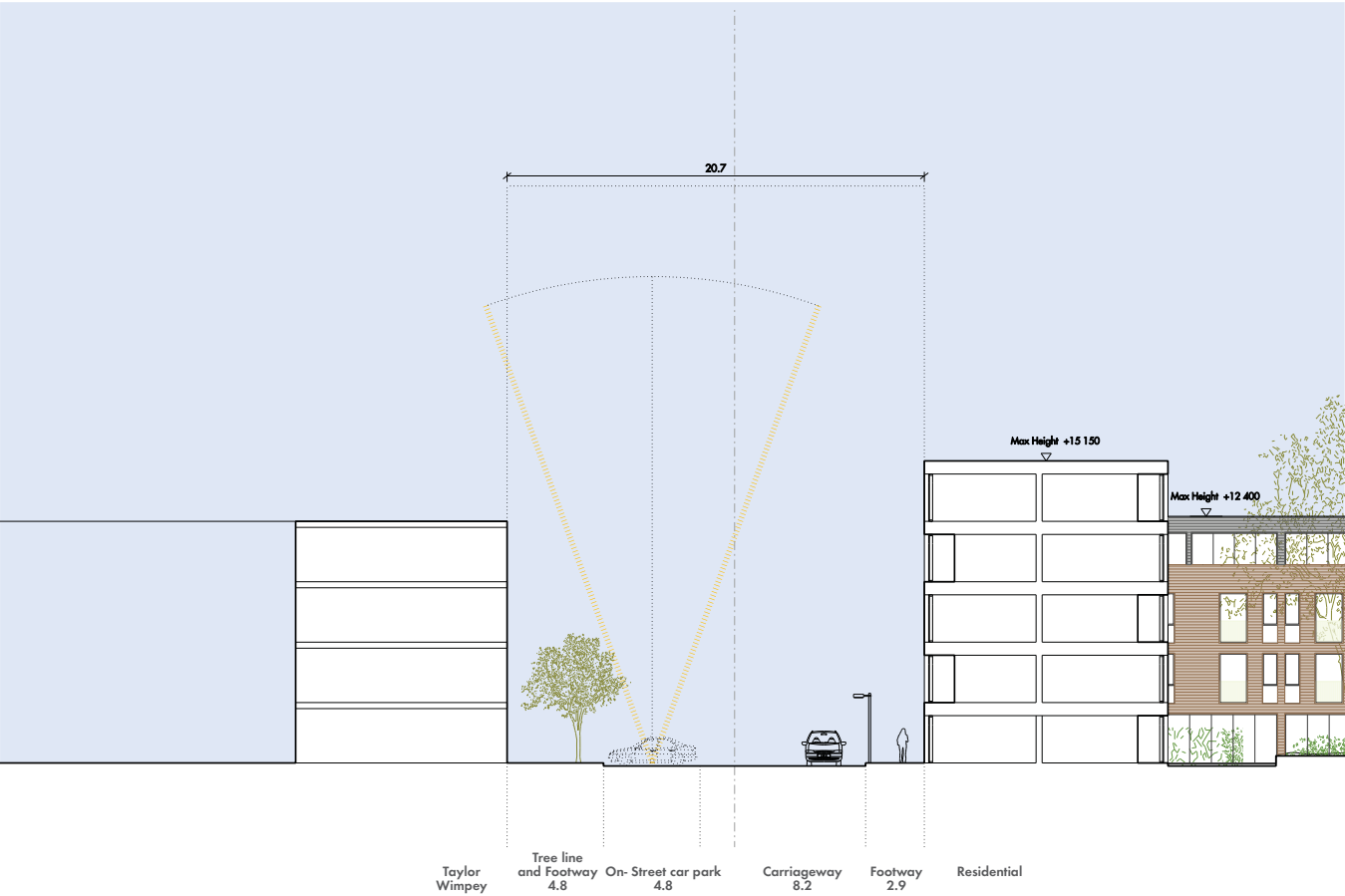


St. Andrews, Allies and Morrison Architects

9.1 Residential area (Plot L-Q)



CC Southern access road near Broadwater Road junction



DD Southern access road

Southern access road – near junction (section CC)

- Overall dimension of this road to be 11m.
- Cycle path to be included within carriageway.
- Footway to be as wide as possible to form barrier between main access road and residential blocks.
- No access to residential streets from this road.
- Facing apartment blocks to be no more than 5 stories.
- Private amenity spaces onto this street to be in the form of recessed balconies.
- Buildings' proximity of approximately 30m.



Queensbridge Quarter, London, Levitt Bernstein Architects

Southern access road (section DD)

- Details as per section CC but here the road is narrower and there should be approximately 20m proximity between buildings.



Roomburg Housing, Leiden, Netherlands, Borst & Snijker Architects

9.1 Residential area (Plot L-Q)



Morrison House, Allies and Morrison Architects



Newnham College, Cambridge, Allies and Morrison Architects



Connaught Gardens, Muswell Hill, Pollard Thomas Edward Architects



Yew tree lodge, Ruislip, Duggan Morris Architects



Newnham College, Cambridge, Allies and Morrison Architects



Newnham College in Cambridge, Allies and Morrison Architects

Residential materials

The residential district should use existing Welwyn Garden City materials, colour, tone and texture in order to enhance the local character and re-inforce the Garden City vision.

Brick is proposed as the predominant cladding material for the residential district. Particular brick type may vary to provide variety and expression between units/blocks. Openings should be framed by deep reveals to express the solidity of the brickwork.

Additional cladding materials such as render may be used to form a secondary layer, thereby providing further relief and variety to the facades. Glazing should be framed by painted timber or painted/powder-coated metal.

Flat roofs should be green, sedum or equivalent, brown roofs to encourage natural planting and wildlife.

Other materials used for elements such as balconies and entrances may include untreated/painted timber, painted/powder-coated metal and glass.



Newnham College in Cambridge, Allies and Morrison Architects



Sketch model photograph looking at north western corner plot of the site

9.2 YMCA and Hotel (Plot B,H)

Brief

Plots B and H are located in the north-eastern corner of the Site, accessed from Bridge Road via an internal access road. The triangular shaped site is bound by the railway lines to the west, the Network Rail Road to the east and the bridge across the railway to the north.

The site offers an ideal combined location to provide amenity or leisure use offering outdoor activities given its adjacency to the reinstated recreation ground, prominence to Bridge Road and excellent access to and from the station.

Feedback from the public consultation and local groups has identified a strong need for a leisure facility in the town, catering particularly for young people, and YMCA Central Herts have expressed interest in the site. In addition to YMCA accommodation, advice from King Sturge suggests that - owing to the currently limited hotel provision in the town - there would be sufficient demand to secure a high end limited service hotel.



Max. floor space hotel: 3,200 sqm
Max. floor space YMCA: 5,800 sqm
Total max. floor space: 9,000 sqm

Maximum proposed development uses on plot B and H



Illustrative ground floor plan of plot B and H

Illustrative layout

The triangular site is large enough to accommodate two buildings with a total floor area of 9,000 sqm. Given the context, it is considered that this floor area should be distributed over a maximum of four storeys.

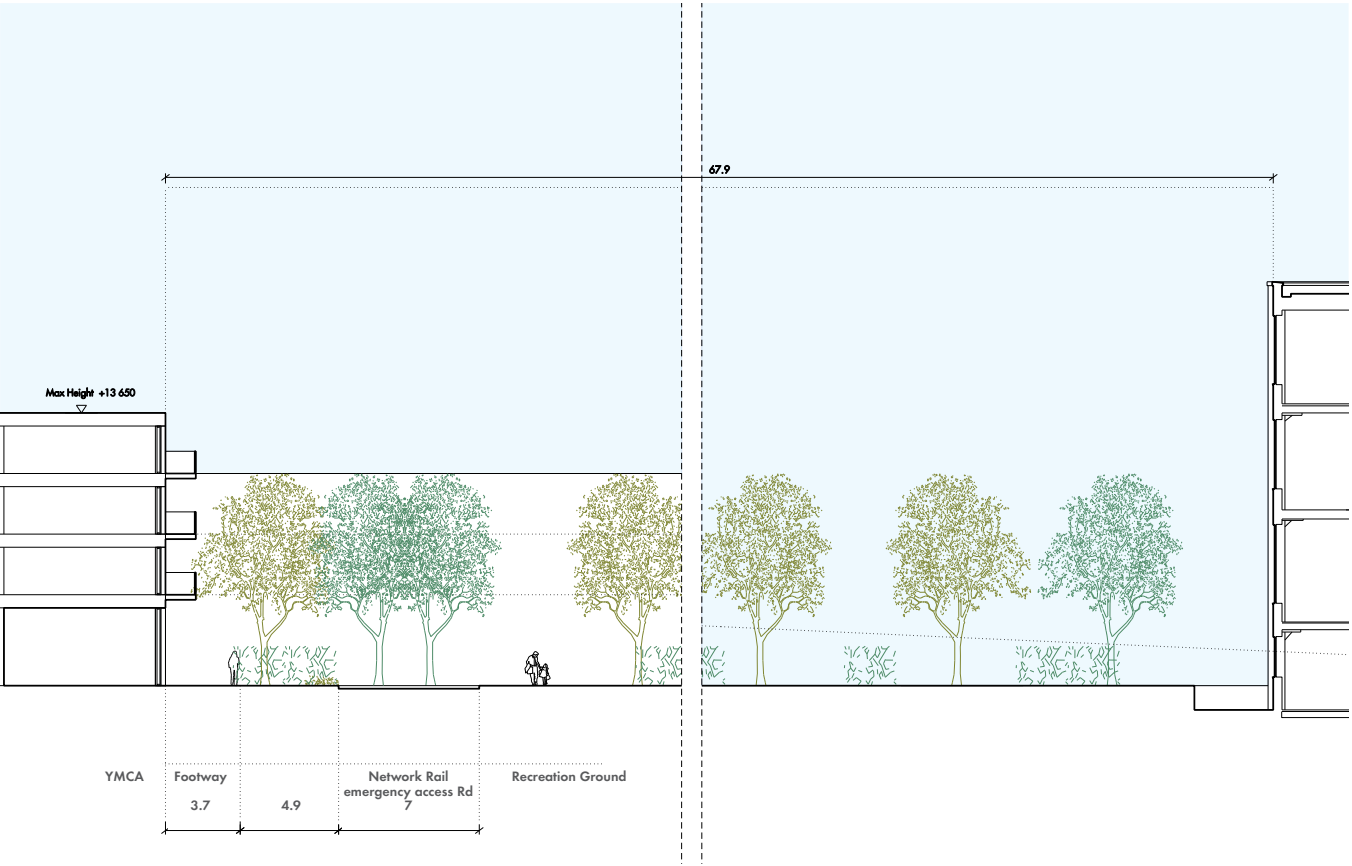
The illustrative scheme currently shows a YMCA facility of 5,800 sqm on the southern portion of the site, and an 80-bed hotel of 3,200 sqm on the northern portion. The YMCA facility could include a nursery, a youth and community centre and residential accommodation 1- and 2-bed units. It is anticipated that the centre would be open to the whole community during school hours, but priority access would be given to the youngsters after 3pm and at weekends.

Should there be insufficient demand for hotel provision when plots B and H become available, the whole triangular site may potentially be taken up by an enlarged YMCA facility of 9,000 sqm.

This enlarged facility might then include: YMCA, YMCA training, community care, YMCA nursery, YMCA youth centre and a YMCA sport and fitness centre. The illustrative ground floor plan by PRP Architects shows the layout of such a facility.



Sketch view of the recreation ground looking south

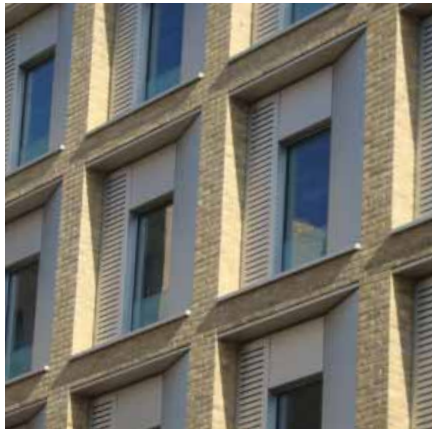


FF North south boulevard and recreation ground

- Recreation park to measure approximately 68m from refurbished production hall to YMCA.
- Minimum width of 7m to NR emergency road.
- Walkway adjacent YMCA to be approximately 3.5m.
- Maximum of 4 storeys to YMCA & Hotel (13.65m).
- Maximum of 3 storeys to northern wing of Hotel extending eastwards to frame park.
- High degree of permeability to YMCA ground floor to enhance connectivity to park. East face should be considered
- 'front of house', with vehicular access, delivery and parking on opposite side.



Fitzwilliam College, Cambridge, Allies and Morrison Architects



University Building, Allies and Morrison Architects



City Inn, Leeds, Allies and Morrison Architects



Connaught Gardens, Muswell Hill, Pollard Thomas Edward Architects



Fitzwilliam College, Cambridge, Allies and Morrison Architects

9.2 YMCA and Hotel (Plot B, H)

YMCA and hotel materials

Majority of glazing should apply to internal spaces and entrances adjacent the park in order to enhance the connection between these spaces and the public realm.

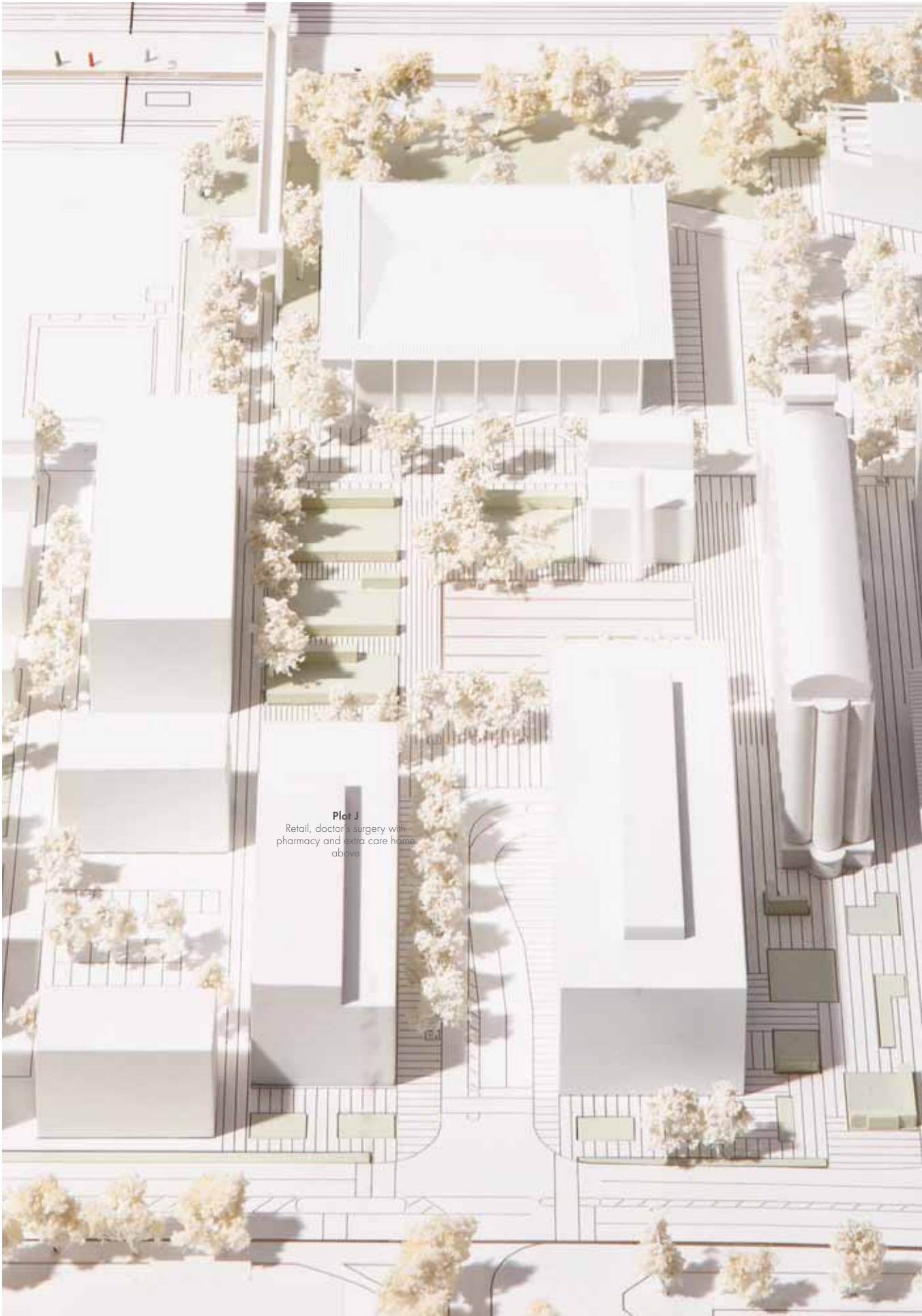
Brick is proposed as the main cladding material to upper storeys in keeping with the remainder of the scheme and existing buildings. Openings above ground level should be more traditional punched windows, again with deep reveals to enhance overall solidity.

Additional materials such as timber cladding, timber/metal louvres, or render may be used to differentiate between parts of the buildings, and should be treated as different planes providing relief to the facades.

Flat green roofs should be green, sedum or equivalent, brown roofs to encourage natural planting and wildlife. Materials may include un-treated/painted timber, painted/powder-coated metal and glass.



Fitzwilliam College Gatehouse, Cambridge, Allies and Morrison Architects



Model of the YMCA and Hotel

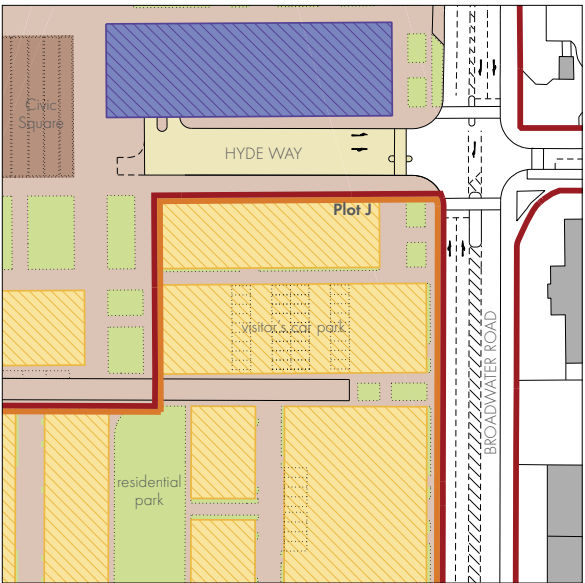
9.3 Doctors surgery and extra care home

The Brief

The site for any development of Plot J defines the southern edge of Hyde Way and contributes to the formation of the civic square with its west facing gable end. The site has a very central location within the Redevelopment and enjoys close proximity to the town centre and good transport links.

In order to facilitate regeneration Spenhill have been committed to bringing to the Site a range of uses that will be beneficial to the Site make up and the wider community. Market analysis has demonstrated a demand for some form of care facility in a central location. Having approached several care home providers Spenhill are proposing a model that best suits the current arrangement of building J on the Site and includes an 'extra care' apartment component. Extra care apartments are positioned between traditional retirement homes and full care nursing homes. This model is considered as most attractive to older local buyers who prefer the benefit of independence and social interaction but enjoy the provision of care facilities close by. The apartments would be designed to be 'care ready' so that new and emerging technologies, such as telecare and community equipment are readily accessible.

The apartments will be separate from the ground floor doctor's surgery and pharmacy. Spenhill have found there to be a considerable amount of interest for a surgery well connected to the town centre. The surgery and pharmacy would complement the extra care apartments above but be independently operated and managed.



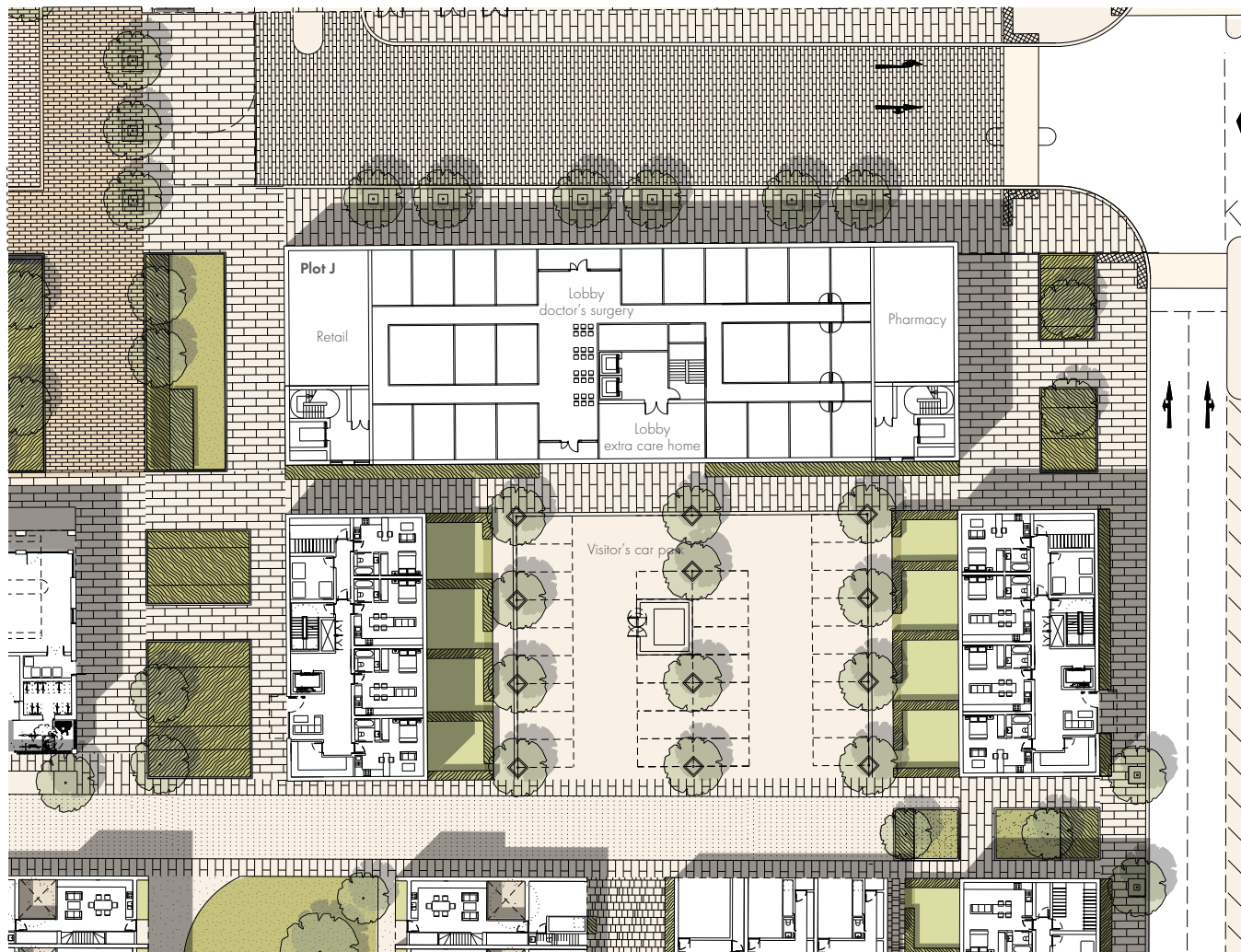
Max. floor space retail: 93 sqm
Max. floor space doctor's surgery: 950 sqm
Max. floor space extra care home: 4,200 sqm
Total max. floor space: 5,243 sqm

Maximum proposed development uses on plot J

Illustrative Layout

The doctor's surgery front door would address Hyde Way while the Pharmacy front door would be around the corner on Broadwater Road. The surgery is well serviced by 14 car spaces to the rear for visitors and staff but will also benefit from the supermarket car parking regime. The facility currently shows up to 10 consultation rooms, a waiting room, reception area and offices and sanitary facilities.

The extra care apartments have a separate front door from the south facing courtyard and car park. From first floor to the fourth floor forty individual apartments would be provided. On the top floor we have illustrated a communal roof terrace overlooking the Civic Square. It would also offer views over the majority of the Site.



Illustrative ground floor plan of plot J