

5.0 Configuration and compliance

5.1 Layout

Ground floor

The ground floor configuration responds primarily to:

- The location of the commercial unit on the southwest corner;
- The position of the residential cores and entrance lobbies (as described under Chapter 4.5);
- The location of the residential uses at ground floor; and
- The intended street character.

Active uses are distributed around the Plot in order to animate all streets, with a concentration of activity to the south and facing the main street. This has determined the layout of the parking with entrance and exit off Great Field and defining a 'H-shaped' circulation route. Cycle parking takes up the majority of the remaining podium areas. The communal heating plant room is located underneath A2 which, being the tallest block, will take the roof plant equipment and the flue riser.

Refuse stores are located adjacent to each communal entrance for convenience and are accessible from outside to prevent contamination of smells into the internal areas.

On the north side the podium footprint is considerably recessed in relation to the building line, allowing for triple aspect to the homes at ground floor. On the south side the podium walls to cycle stores will have a permeable wall solution which, together with the gated openings on the opposite walls will provide cross ventilation to the parking areas.













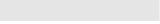

Social Rent			Other uses				
	1B2P		4B5P		Ancillary		3-storey townhouse
	3B5P		4B6P		Commercial		2-storey maisonette
	3B6P		5B6P		Service		Accessible home M4(3)

Figure 5.1: Proposed Ground Floor Plan

First floor

The first floor podium is defined by the two residential courtyards. In each of these the central space provides a shared garden and play area while the edges are taken up by residential terraces to the first floor apartments. Access to the shared gardens is via the communal cores, with blocks A1 and A2 having access to the west courtyard and block A3 to the east courtyard.

Following the advice of the Secure by Design (SbD) Designing Out Crime Officer, there will be no through-access between the two courtyards.

All first floor homes facing courtyards will have access to the garden from their external terraces, irrespective of core access. The houses in A4 and A5 will also access their respective shared courtyards via the first floor private terraces. The courtyards will be tenure blind, with identical design and amenity offer. Further details on the courtyard gardens can be found in Chapter 5.3 and Chapter 7.9.

The first floor of A3 comprises a number of wheelchair accessible homes which will benefit from level access between the dwelling and the shared gardens via their terraces as well as via the communal circulation routes.

Where the distance between building façades is locally reduced at first and second floors between the houses (A4, A5) and the adjacent apartment blocks (A1, A2, A3) privacy is retained by carefully locating opposing windows so that they do not face each other. All of these homes are double or triple aspect and with principal windows facing the street. Additionally, the landscape design ensures other residents are not able to approach the first floor windows.



Affordable Shared Ownership		Social Rent			
 1B2P	 1B2P	 4B5P	TH	3-storey townhouse	
 2B3P	 2B3P	 4B6P	M	2-storey maisonette	
 2B4P	 3B6P	 5B6P		Accessible home M4(3)	



Figure 5.2: Proposed First Floor Plan

5.0 Configuration and compliance

Typical upper floor

At the upper levels, the floorplates standardise to a rational layout of 1-bedroom 2-person, 2-bedroom 3-person (wheelchair accessible) and 2-bedroom 4-person homes.

The uppermost floor of block A1, level 08, sets back from the streets to create a roof terrace for five apartments and reduce the visual impact from the street.



Affordable Shared Ownership		Social Rent		♿ Accessible home M4(3)
	1B2P		1B2P	
	2B3P		2B3P	
	2B4P		2B4P	

Figure 5.3: Block A1 Eighth Floor Plan

Figure 5.4: Typical Upper Floor Plan

Roof

The roofs of Plot A have been designed to maximise contributions to the ecology and sustainability strategies simultaneously. The majority of the roof area is therefore designed as a biodiverse roof, including the houses in A4 and A5, contributing to biodiversity and urban greening.

The roof of A2 will house the air source heat pumps required by the sustainability strategy. As a result this roof will be provided with full access via lift and stairs for safe maintenance. The plant area will be appropriately screened off to mitigate any negative visual impact to the public realm as well as to the adjacent residential properties. To make the most of the roof area available, the plant in A2 is raised on a platform that allows for the area underneath to still contribute to biodiversity.

Photovoltaic panels will be integrated on the south facing roof areas of A2 and will be concealed by a solid parapet 1500mm high which will also work as edge protection.

The top floor of block A1 is set back from the facade, providing the opportunity to create generous residential terraces at level 8.

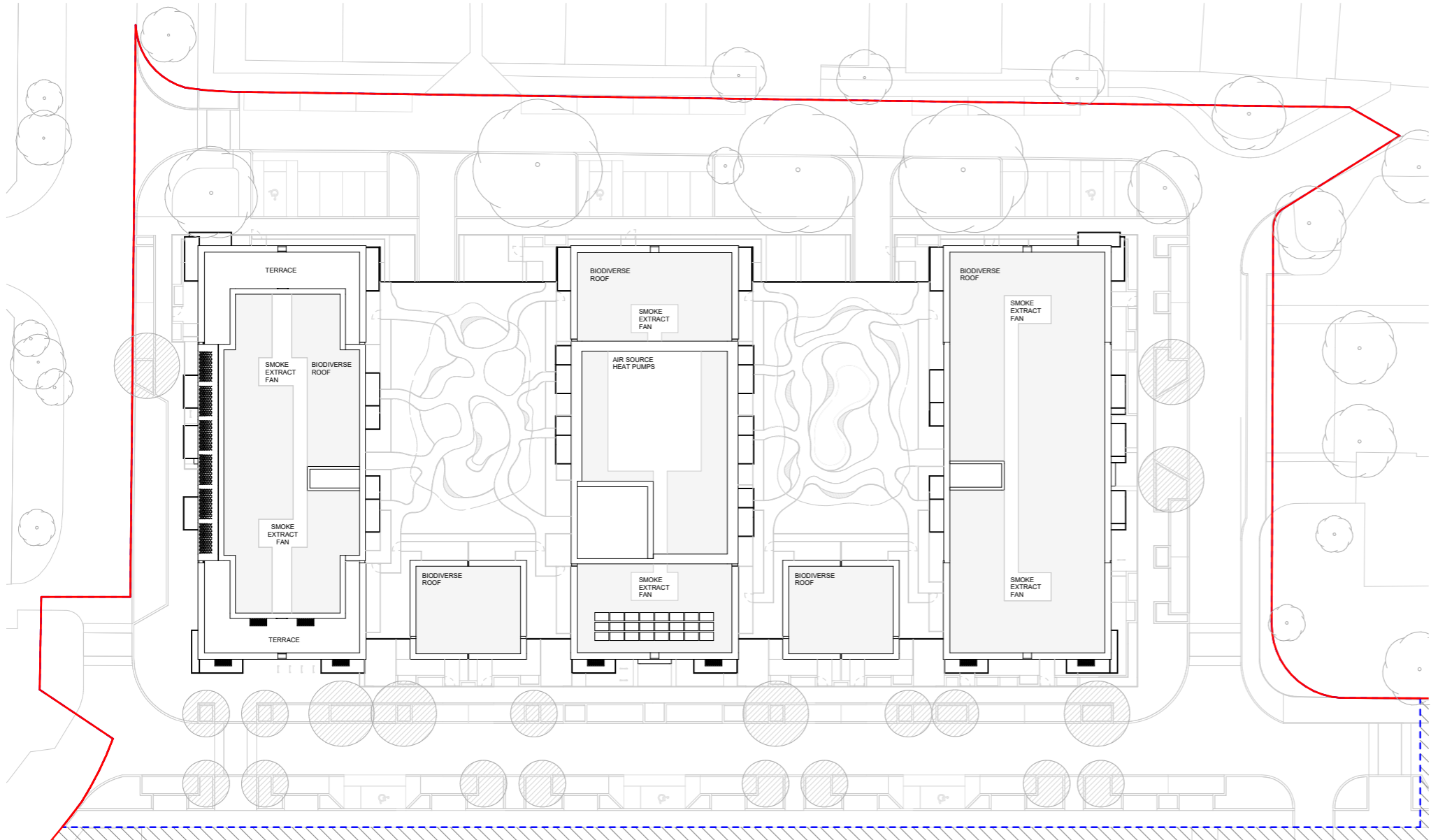


Figure 5.5: Roof Plan

5.0 Configuration and compliance

5.2 Amount

The first phase of Grahame Park proposes to deliver **209 homes** / 542 habitable rooms in approximately 1Ha site area. This corresponds to a total build of 18,347sq.m of residential GIA and 408 sq.m GIA of commercial use.

The residential mix for the Social Rent (SR) tenure reflects the need for re-provision of existing homes which will be demolished in later phases of the regeneration programme. As a result, the SR tenure provides a diverse mix of sizes and a larger percentage of family homes than the Affordable Shared Ownership. In total **60 Social Rent homes** and **149 Affordable Shared Ownership homes** will be delivered.

The residential provision is split between the houses and the three blocks, with 69 homes provided in A1, 82 homes in A2 and 54 homes in A3. The houses provide 4 homes in total, divided in two blocks (A4 and A5).

All homes have been designed to meet or exceed the minimum criteria defined in the Technical Housing Standards - **Nationally Described Space Standard**.

10% of all homes provided are designed to be wheelchair accessible in compliance with Building Regulations Approved Document M4(3) and these are split between 9 adaptable homes in the Shared Ownership tenure and 12 accessible homes in the Social Rent tenure. The remaining 90% homes are compliant with Building Regulations Approved Document M4(2). Further details on accessible housing provision can be found in Chapters 5.6 to 5.9 of this document.

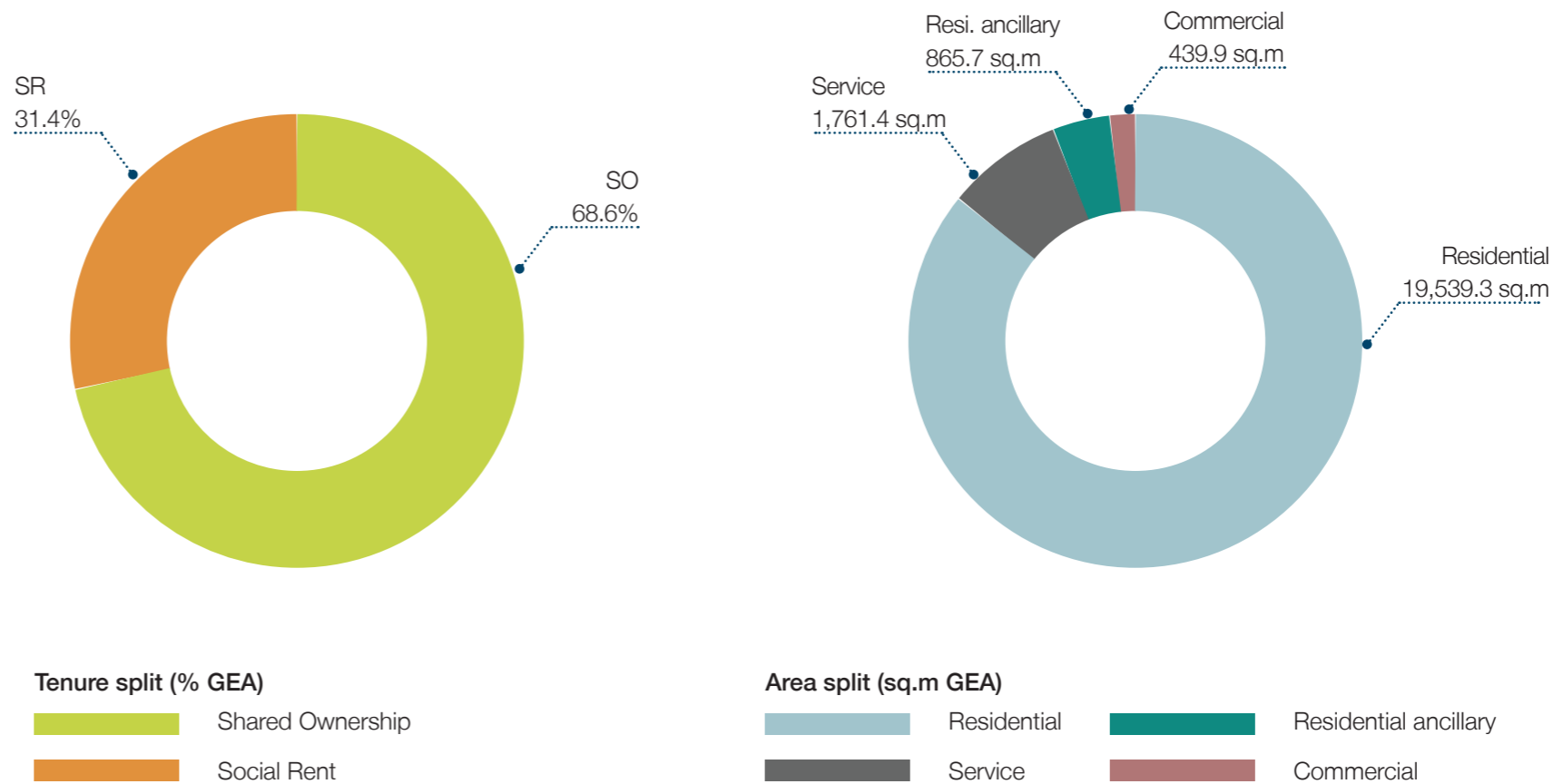


Figure 5.6: Residential area (C3 + C3 Anc.) split by tenure

Figure 5.7: Total area split by use

	GEA		GIA		NIA	
	Sq.m	Sq.ft	Sq.m	Sq.ft	Sq.m	Sq.ft
Shared Ownership						
C3	13,381.21	144,034.15	11,962.09	128,758.86	9,270.63	99,788.23
C3 (Anc.)	610.64	6,572.87	580.19	6,245.11		
Sub-total	13,991.85	150,607.02	12,542.28	135,003.98		
Social Rent						
C3	6,158.10	66,285.24	5,484.87	59,038.65	4,442.86	47,822.55
C3 (Anc.)	255.04	2,745.23	241.16	2,595.82		
Sub-total	6,413.14	69,030.46	5,726.03	61,634.47		
All tenures						
C3	19,539.31	210,319.38	17,446.96	187,797.51	13,713.49	147,610.78
C3 (anc.)	865.68	9,318.10	821.35	8,840.94		
Sub-total	20,404.99	219,637.48	18,268.31	196,638.45		
Service	1,761.35	18,959.01	1,723.65	18,553.21		
Commercial	439.85	4,734.51	408.68	4,398.99		
ALL USE CLASSES	22,606.19	243,331.00	20,400.64	219,590.66		

Figure 5.8: Area Schedule

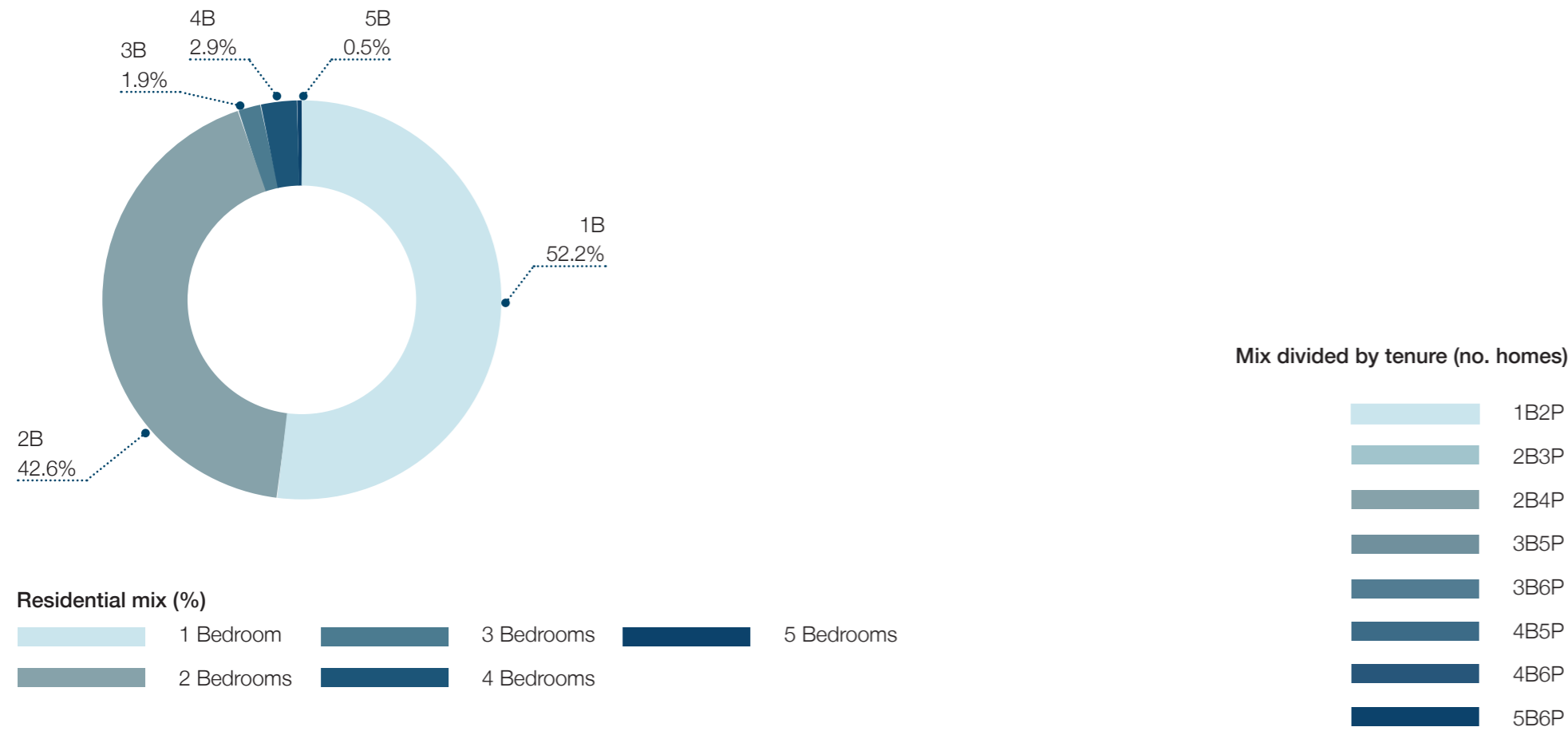


Figure 5.9: Overall residential mix

Shared Ownership	1 Bedroom 81 homes 54.4%		2 Bedroom 68 homes 45.6%		3 Bedroom 0 homes 0.0%			4 Bedroom 0 homes 0.0%		5 Bedroom 0 homes 0.0%
149 homes 366 habitable rooms	1B2P 81 flats 162 HR	1B2PW 0 flats 0 HR	2B3PW 9 flats 27 HR	2B4P 59 flats 177 HR	3B5PW 0 flats 0 HR	3B6PW 0 flats 0 HR	3B6PM 0 maisonnettes 0 HR	4B5PW 0 flats 0 HR	4B6PH 0 houses 0 HR	5B6PH 0 houses 0 HR
Social Rent	1 Bedroom 28 homes 46.7%		2 Bedroom 21 homes 35.0%		3 Bedroom 4 homes 6.7%			4 Bedroom 6 homes 10.0%		5 Bedroom 1 homes 1.7%
60 homes 176 habitable rooms	1B2P 27 flats 54 HR	1B2PW 1 flats 2 HR	2B3PW 6 flats 18 HR	2B4P 15 flats 45 HR	3B5PW 1 flats 4 HR	3B6PW 1 flats 5 HR	3B6PM 2 maisonnettes 8 HR	4B5PW 3 flats 15 HR	4B6PH 3 houses 18 HR	5B6PH 1 houses 7 HR
All tenures	1 Bedroom 109 homes 52.2%		2 Bedroom 89 homes 42.6%		3 Bedroom 4 homes 1.9%			4 Bedroom 6 homes 2.9%		5 Bedroom 1 homes 0.5%
209 homes 542 habitable rooms	1 Bedroom flats 109 homes		2 Bedroom flats 89 homes		3 Bedroom flats 2 homes		3 Bedroom maisonnettes 2 homes	4 Bedroom flats 3 homes	4 Bedroom houses 3 homes	5 Bedroom houses 1 homes
	1B2P 108 flats 216 HR 5509.3 sqm	1B2PW 1 flats 2 HR 62.7 sqm	2B3PW 15 flats 45 HR 1170.2 sqm	2B4P 74 flats 222 HR 5563.1 sqm	3B5PW 1 flats 4 HR 110.8 sqm	3B6PW 1 flats 5 HR 129.4 sqm	3B6PM 2 maisonnettes 8 HR 238.8 sqm	4B5PW 3 flats 15 HR 376.6 sqm	4B6PH 3 houses 18 HR 414.5 sqm	5B6PH 1 houses 7 HR 138.2 sqm

Figure 5.10: Schedule of Accommodation

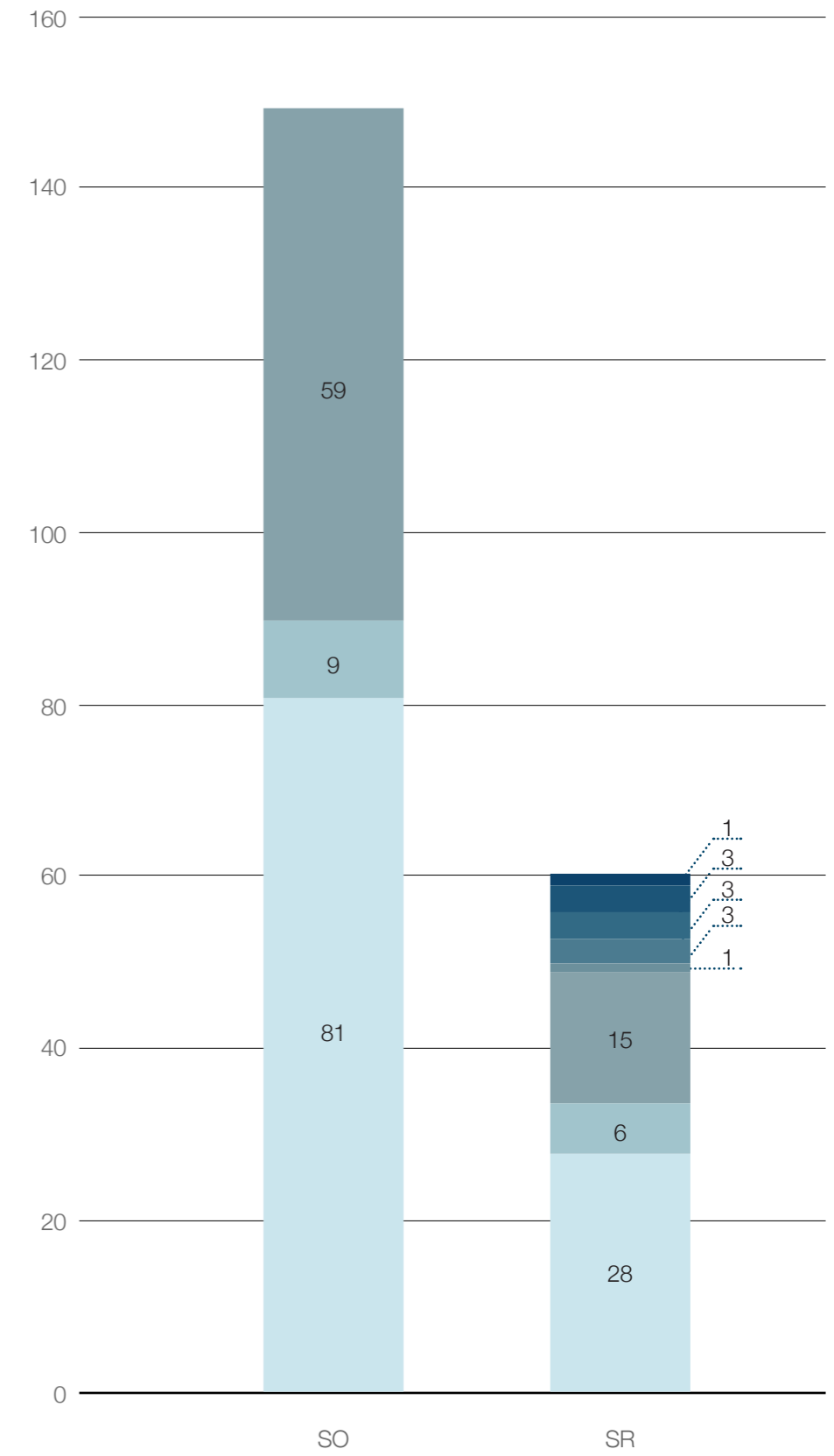


Figure 5.11: Residential mix divided by tenure

5.0 Configuration and compliance

5.3 External amenity strategy

External amenity spaces play a fundamental role in residential developments, promoting outside living, encouraging socialisation and contributing to the well being of the residents.

LBB's Sustainable Design and Construction SPD (**Section 2.3**) requires large developments to provide a minimum of 5sq.m of external amenity area per habitable room for apartments and between 40 and 85sq.m per house depending on size. In Plot A external amenity is provided as:

- Private balconies;
- Private terraces at ground, first, eighth floor; and
- Semi-private courtyard gardens at first floor.

In total Plot A delivers 2,900 sq.m of amenity area, in compliance with the requirements in the LBB's SPD. This will be complemented by the public amenity provided in Heybourne Park via the wider masterplan.

Residential amenity: upper floors

Typically, upper floor homes will be provided with external balconies to suit apartment size, in compliance with the requirements in the Mayor of London Housing SPG (**Standard 26**) and Draft New London Plan (**Policy D4**), as follows:

- 1-2 person dwellings: 5 sq.m.
- 3+ person dwellings: 5 sq.m for the first 2 occupants + 1sq.m for each additional occupant.

The location of the balconies respond to orientation, setting and internal layout configuration:

- **Type 1:** courtyard facing balconies oriented west / east, providing views of the courtyard gardens as well as glimpses of Heybourne park or the articulated skyline of the mansion blocks.
- **Type 2:** south facing balconies, reinforcing the importance of Nighthawk Road while taking advantage of the south orientation.
- **Type 3:** street facing balconies on the more exposed side streets. These have long views towards the west and east sides and capture glimpses of the Park at either side of Plot B.
- **Type 4:** street corners. Located on the prominent outer north corners of the plot, they alternate between north and west/east façades at each floor. They provide visual interest to the corners and, by extending past the building footprint, all balconies receive light from the south and get long views towards the Park.

For details of the balcony treatment and how privacy is addressed refer to Chapter 6.7.



Figure 5.12: Precedent: projecting balconies

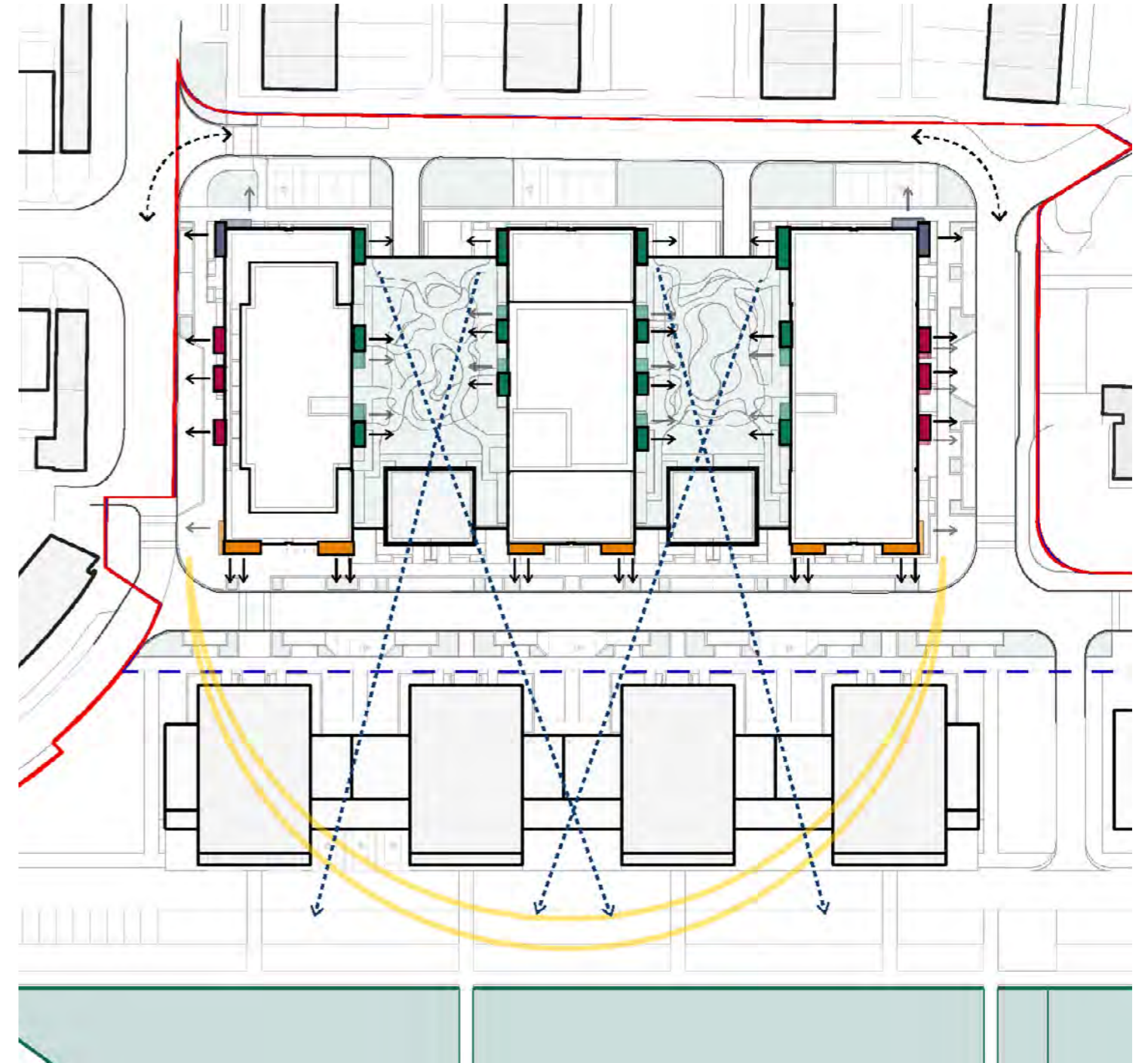


Figure 5.13: Upper floors amenity strategy



Figure 5.14: First floor amenity strategy

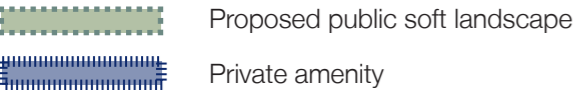


Figure 5.15: Ground floor amenity strategy

Houses

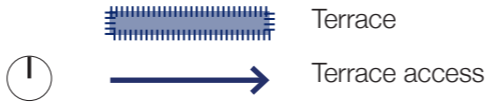
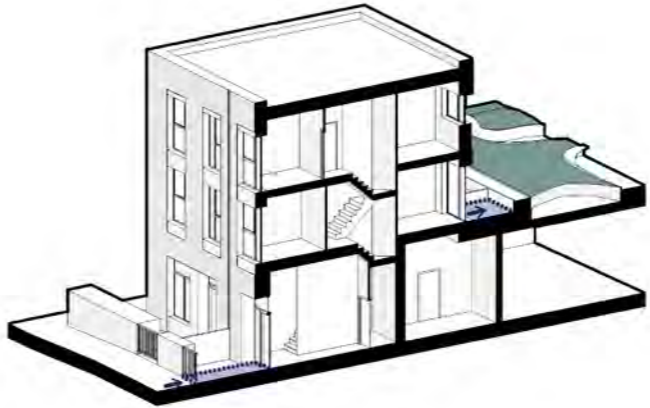


Figure 5.16: Houses amenity diagram

Courtyard terraces

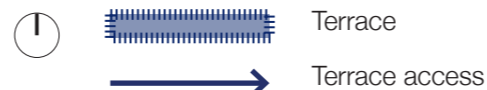
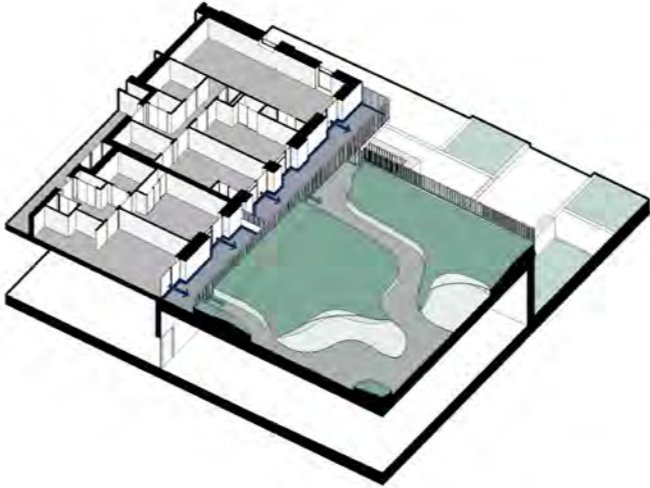


Figure 5.17: First floor homes amenity diagram

Eighth floor (A1)

All dwellings located at the top floor of A1 will enjoy residential terraces instead of balconies, accessible from the living rooms.

First floor

The first floor amenity is provided as a mix of balconies serving the street facing apartments and terraces to the courtyard apartments, maisonettes and houses.

The terraces have a minimum depth of 1500mm and areas in compliance with the Housing SPG (Standard 27). All terraces give direct access to the shared gardens through a low level metal gate.

Ground floor

All ground floor homes are provided with a defensible space surrounding the dwelling. This space provides privacy to the internal spaces by keeping the pedestrians an appropriate distance away from any residential windows.

Typically, these zones are maximised to provide usable hard landscaped terraces accessible from the living rooms as well as planting areas for the residents. Further details can be found in Chapter 7.

Multi-storey homes

Plot A includes a number of double and triple aspect multi-storey homes located along the south facade. The majority of these are adjacent to the courtyard and therefore enjoy an amenity space at grade as well as access to a private terrace at first floor level.

The 3-storey houses are designed to have the kitchen and dining room at the ground floor, and living room at the first floor so that both living areas have direct access to an external amenity space, while bedrooms occupy the more private areas of the upper floors.

5.0 Configuration and compliance

5.4 Residential design quality

In order to ensure residential quality, careful consideration has been given to internal living standards for each dwelling.

Buildings have been designed from the inside out. Tall ceilings, generous glazing and careful arrangement of living spaces will maximise views and sunlight or daylight entering the habitable rooms for part of the day, particularly the living room areas, kitchen dining spaces and bedrooms. Parallel considerations on privacy and overheating ensure a balance is achieved between these objectives.

A variety of dwelling types will be delivered without single-aspect north facing homes, and providing all homes with good levels of private amenity with level access to one or more balconies or terraces. All dual aspect flats enjoy living rooms with corner amenity, to maximise views and inside/outside living.

The internal layouts have been developed to achieve an appropriate separation between social and private spaces, with all bedrooms grouped together and accessed off circulation corridors. Generally, kitchens have been located in open plan arrangements but designed as clearly delimited zones so that they do not dominate the living spaces.

Multi-storey homes along the south street typically have the kitchen, dining and living spaces at ground floor with bedrooms located on the upper floor for an increased sense of privacy to these rooms.

The journey home

The high quality design is not exclusive to the internal residential spaces, extending to the totality of the journey home. This includes the design of the landscape at the approach routes, communal entrances, lobbies and circulation corridors.

At the exit from the lifts at every floor there is a generous lobby area with natural light and a view towards the courtyard, giving residents a sense of orientation and belonging.

The interior design of homes and common lobby areas will be developed during the next stage of design to bring a harmonious feel to the whole experience of moving through the buildings.

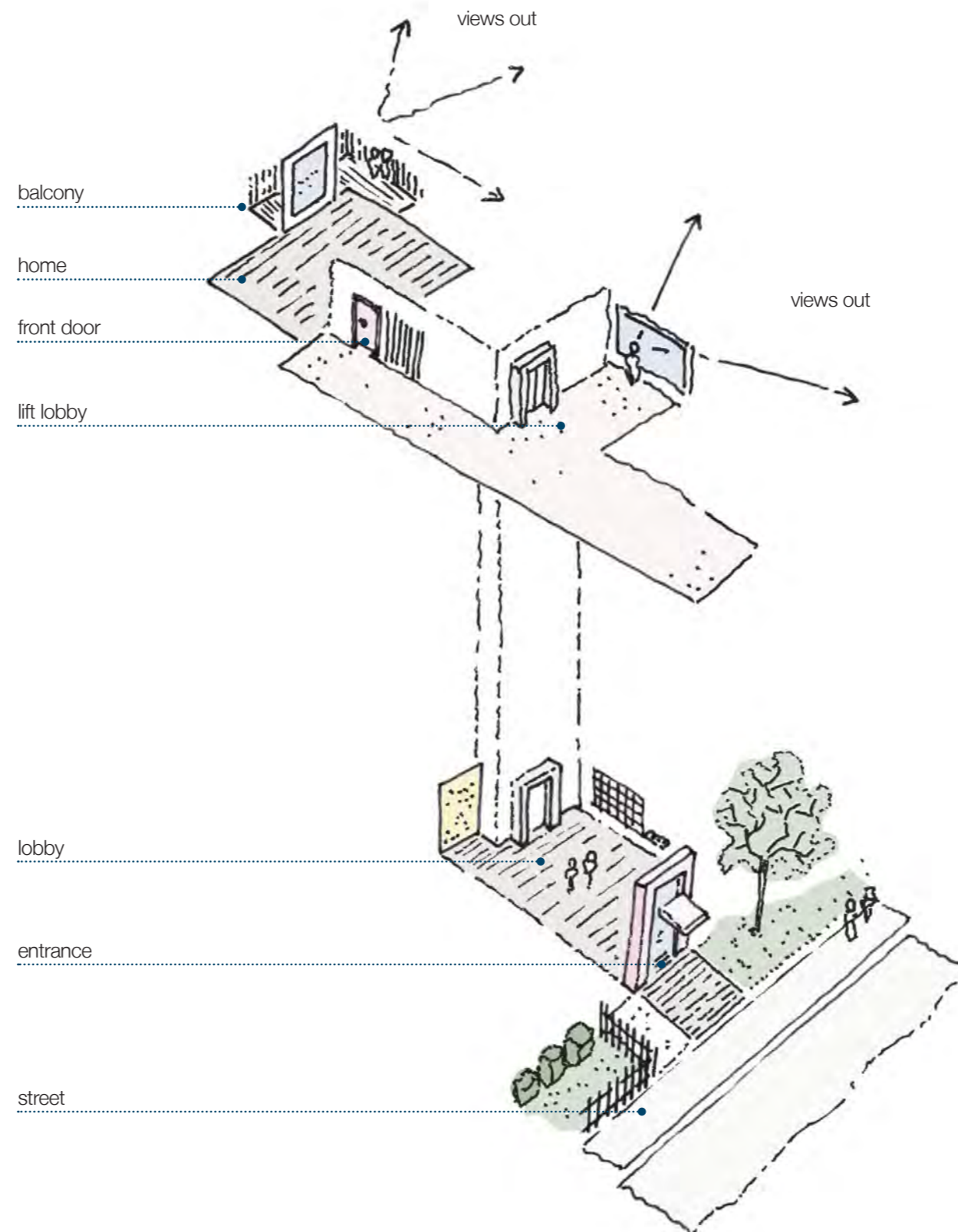


Figure 5.18: The journey home: the residential quality is expressed in the design of the access routes, entrance lobbies, lift lobbies, internal layouts and amenity spaces.



1 Bedroom 2 Person
 Minimum area: 50 sq.m
 Minimum storage: 1.5 sq.m
 Bathrooms: 1 bathroom
 Amenity: 5 sq.m

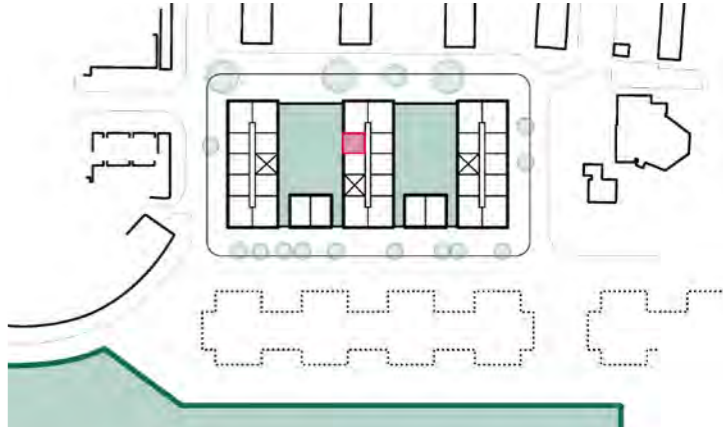


Figure 5.19: Typical 1 Bedroom 2 Persons (Shared Ownership)

Figure 5.21: Axonometric view

Figure 5.23: Key plan



2 Bedroom 4 Person
 Minimum area: 70 sq.m
 Minimum storage: 2 sq.m
 Bathrooms: 1 bathroom + 1 ensuite
 Amenity: 7 sq.m

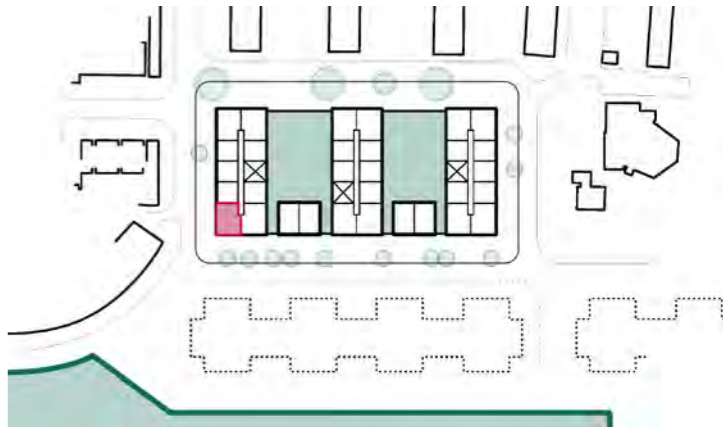


Figure 5.20: Typical 2 Bedroom 4 Persons (Shared Ownership)

Figure 5.22: Axonometric view

Figure 5.24: Key plan

5.0 Configuration and compliance



3 Bedroom 6 Person

Minimum area: 102 sq.m

Minimum storage: 2.5 sq.m

Bathrooms: 1 bathroom + 1 shower room

Amenity: 34.2 sq.m

First floor



Ground floor

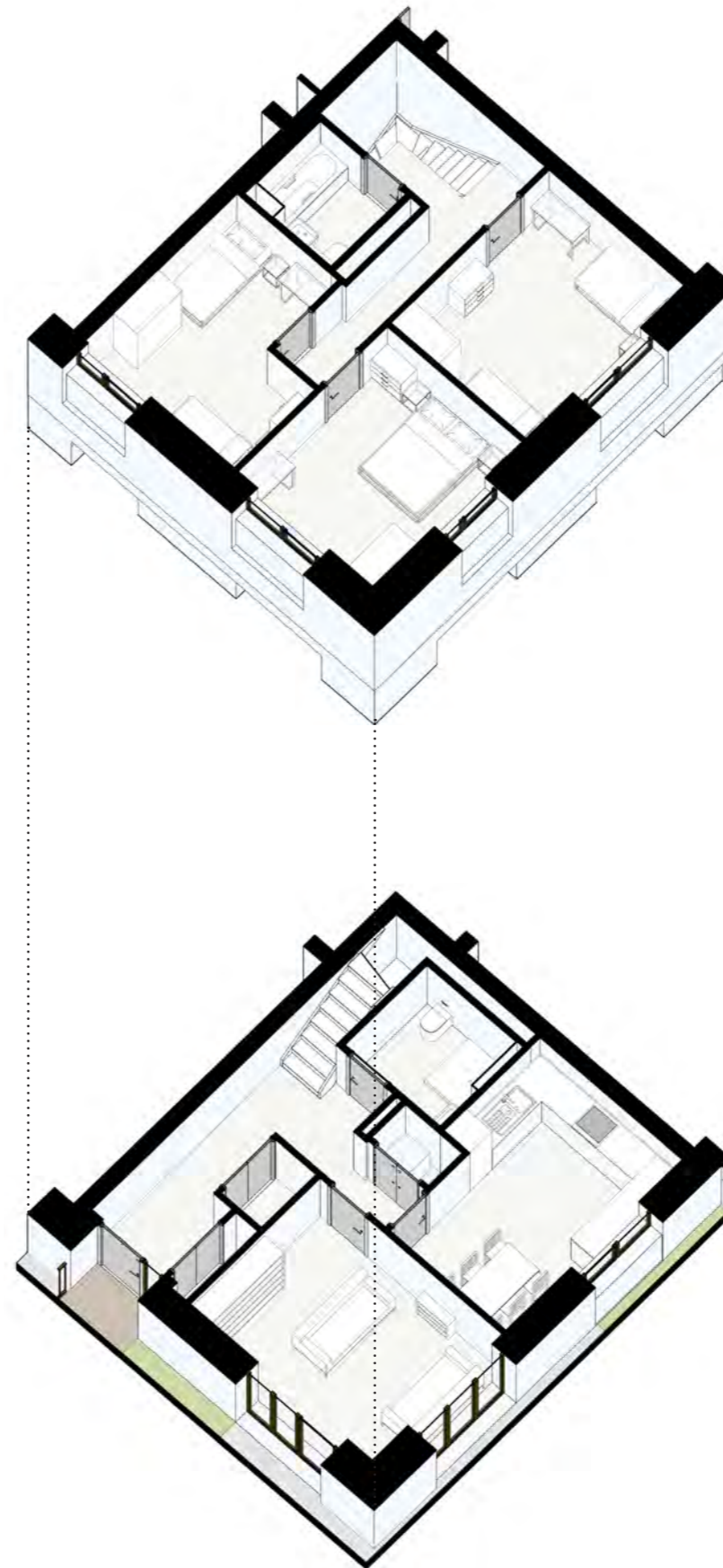


Figure 5.26: Axonometric view

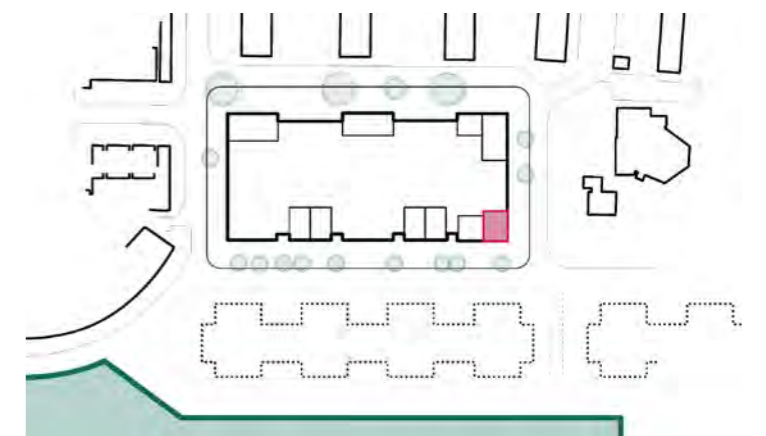


Figure 5.27: Key plan

Figure 5.25: Typical 3 Bedroom 6 Persons Maisonette (Social Rent)

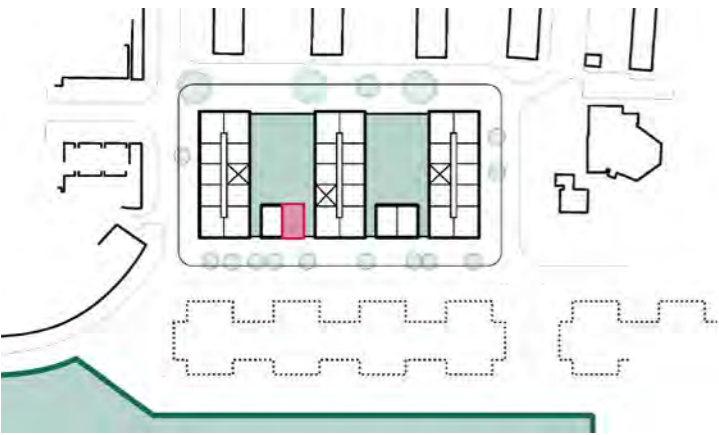
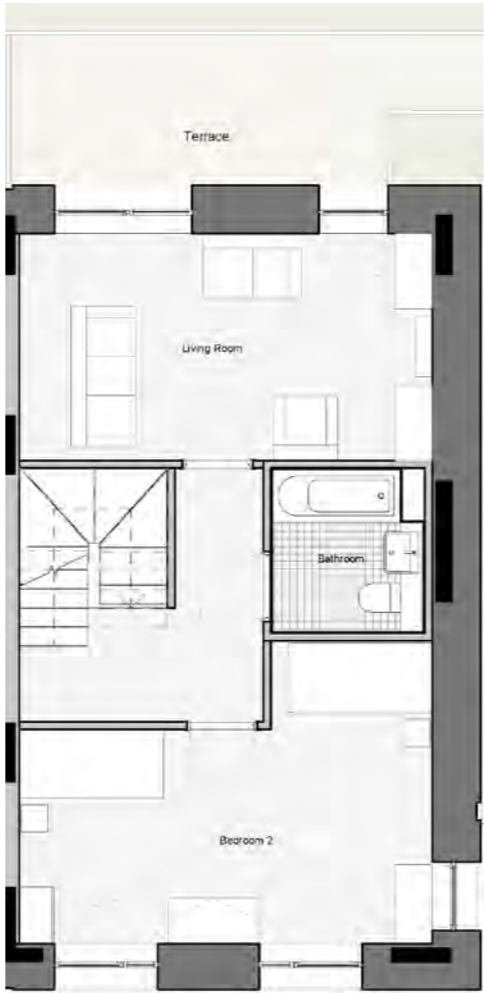


Figure 5.28: Key plan

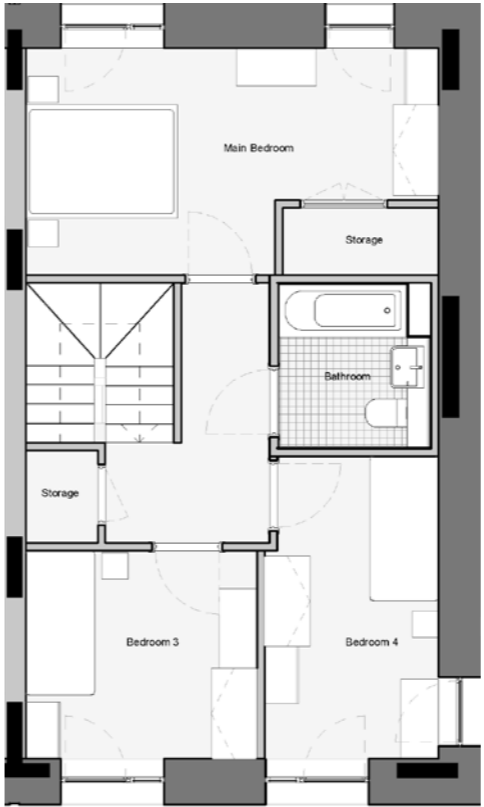
4 Bedroom 6 Person
 Minimum area: 112 sq.m
 Minimum storage: 3 sq.m
 Bathrooms: 2 bathrooms + 1 WC
 Amenity: 29.4 sq.m



Ground floor



First floor



Second floor

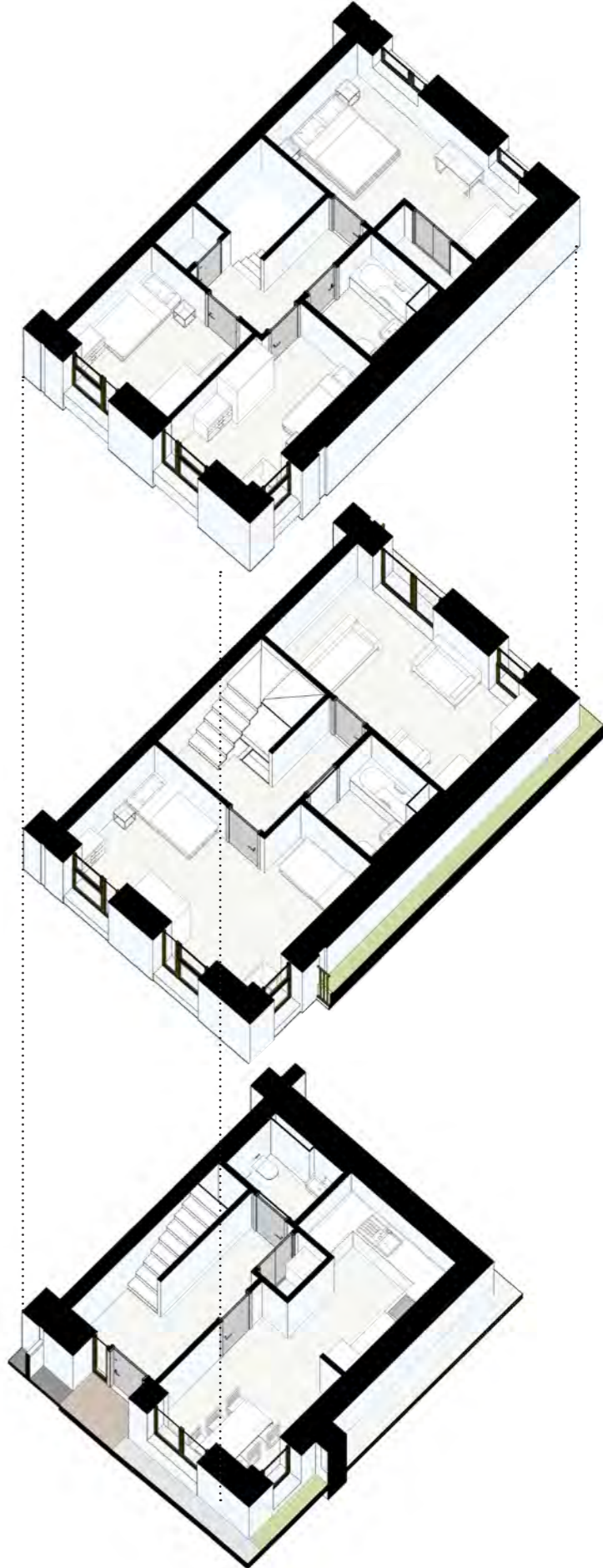


Figure 5.30: Axonometric view

Figure 5.29: Typical 5 Bedroom 6 Persons House (Social Rent)

5.0 Configuration and compliance

5.5 Design compliance

1.0	DWELLING SPACE STANDARDS	SOURCE	BASELINE	GOOD PRACTICE COMPLIANCE	JUSTIFICATION																																																																											
1.1	Internal Floor Area																																																																															
1.1.1	All developments should meet the following minimum space standards:	Ministry of Housing, Communities & Local Government (MHCLG) Technical housing standards - Nationally Described Space Standard (NDSS) 2016	✓	✓	100% of the total number of homes comply with the minimum space standards.																																																																											
	<table border="1"> <thead> <tr> <th>Number of bedrooms(b)</th> <th>Number of bed spaces (persons)</th> <th>1 storey dwellings</th> <th>2 storey dwellings</th> <th>3 storey dwellings</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1b</td> <td>1p</td> <td>39 (37) *</td> <td></td> <td></td> </tr> <tr> <td>2p</td> <td>50</td> <td>58</td> <td></td> </tr> <tr> <td rowspan="2">2b</td> <td>3p</td> <td>61</td> <td>70</td> <td></td> </tr> <tr> <td>4p</td> <td>70</td> <td>79</td> <td></td> </tr> <tr> <td rowspan="3">3b</td> <td>4p</td> <td>74</td> <td>84</td> <td>90</td> </tr> <tr> <td>5p</td> <td>86</td> <td>93</td> <td>99</td> </tr> <tr> <td>6p</td> <td>95</td> <td>102</td> <td>108</td> </tr> <tr> <td rowspan="4">4b</td> <td>5p</td> <td>90</td> <td>97</td> <td>103</td> </tr> <tr> <td>6p</td> <td>99</td> <td>106</td> <td>112</td> </tr> <tr> <td>7p</td> <td>108</td> <td>115</td> <td>121</td> </tr> <tr> <td>8p</td> <td>117</td> <td>124</td> <td>130</td> </tr> <tr> <td rowspan="3">5b</td> <td>6p</td> <td>103</td> <td>110</td> <td>116</td> </tr> <tr> <td>7p</td> <td>112</td> <td>119</td> <td>125</td> </tr> <tr> <td>8p</td> <td>121</td> <td>128</td> <td>134</td> </tr> <tr> <td rowspan="2">6b</td> <td>7p</td> <td>116</td> <td>123</td> <td>129</td> </tr> <tr> <td>8p</td> <td>125</td> <td>132</td> <td>138</td> </tr> </tbody> </table>	Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	1b	1p	39 (37) *			2p	50	58		2b	3p	61	70		4p	70	79		3b	4p	74	84	90	5p	86	93	99	6p	95	102	108	4b	5p	90	97	103	6p	99	106	112	7p	108	115	121	8p	117	124	130	5b	6p	103	110	116	7p	112	119	125	8p	121	128	134	6b	7p	116	123	129	8p	125	132	138	London Borough of Barnet (LBB) Sustainable Design and Construction Supplementary Planning Document (SPD) 2016			
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1.1.2	Dwelling plans should demonstrate that dwellings will accommodate the furniture, access and activity space requirements relating to the declared level of occupancy.	Building Regulations Approved Document M 2015 + 2016 amendments (ADM) 4(2) / ADM4(3)	✓	✓																																																																												
1.2	Circulation in the Home The minimum width of hallways and other circulation spaces inside the home should be 900mm. This may reduce to 750mm at 'pinch points' e.g. next to radiators, where doorway widths meet the following specification:	ADM4(2)	✓	✓	All homes meet the minimum corridor width. Corridors within dwellings are generally 1050mm or over.																																																																											
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Doorway clear opening width (mm)	Corridor clear passageway width																																																																															
750 or wider	900 (when approached head on)																																																																															
750	1200 (when approach is not head-on)																																																																															
775	1050 (when approach is not head-on)																																																																															
800	900 (when approach is not head-on)																																																																															
1.2.1	Where a hallway is at least 900mm wide and approach to the door is head on, a minimum clear opening door width of 750mm should be provided.	ADM4(2)	✓	✓	All residential doorway clear opening widths are in excess of 775mm.																																																																											
1.3	Living / Dining / Kitchen																																																																															
1.3.1	A living area (living room, dining room or combined kitchen and dining room) shall be provided within the entrance storey*.	ADM4(2)	✓	✓	100% of units comply.																																																																											
1.3.2	Glazing to the principal window of the principal living area should start a maximum of 850mm above floor level. The handle to at least one opening window in the principal living area shall be located between 450mm and 1200mm above floor level.	ADM4(2)	✓	✓	100% of units comply.																																																																											
1.4	Bedrooms																																																																															
1.4.1	The minimum area of a single bedroom should be 7.5 sqm. The minimum area of a double or twin bedroom should be 11.5 sqm.	MHCLG Technical housing standards: NDSS	✓	✓	100% of units comply.																																																																											
1.4.2	The minimum width of the main double bedroom is at least 2.75m and any other double or twin bedroom is at least 2.55m.	MHCLG Technical housing standards: NDSS	✓	✓	100% of units comply.																																																																											

		SOURCE	BASELINE	GOOD PRACTICE COMPLIANCE	JUSTIFICATION
1.4.3	Bathrooms and WCs Dwellings designed for an occupancy of five or more people should provide a minimum of one bathroom with WC and one additional WC.	MHCLG Technical housing standards: NDSS	✓	✓	All apartments with potential occupancy of 5 or more have one family bathroom with WC and one ensuite or additional WC.
1.4.4	Where there is no accessible bathroom at entrance level, a wheelchair accessible WC with potential for a level access shower to be installed should be provided at entrance level * ∞.	ADM4(2)	✓	✓	All multi-storey dwellings provide a WC at entrance level with provision for a level access shower to be installed.
1.4.5	An accessible bathroom should be provided in every dwelling on the same storey as a main bedroom.	ADM4(2)	✓	✓	100% of the units comply.
1.4.6	Walls in bathrooms and WCs should be capable of taking adaptations such as handrails †.	ADM4(2)	✓	✓	100% of the units comply.
1.5	Storage and Utility				
1.5.1	All dwellings are to have built-in general internal storage space free of hot water cylinders and other obstructions, with a minimum internal height of 2m, in addition to storage provided by furniture in habitable rooms. Built-in wardrobe area in excess of 0.72sq.m in a double bedroom to count towards the built-in storage requirement.	MHCLG Technical housing standards: NDSS	✓	✓	100% of the units comply.
1.5.2	All homes provide the minimum built-in storage areas as follows: 1.5sq.m for 1-bedroom homes, 2sq.m for 2-bedroom homes, 2.5sq.m for 3-bedroom homes, 3sq.m for 4-bedroom homes, 3.5sq.m for 5-bedroom homes.	MHCLG Technical housing standards: NDSS	✓	✓	100% of the units comply. M4(3) homes may be provided with additional storage as required by ADM4(3). Refer to Chapter 5.9 of this document.
1.5.3		LBB Sustainable Design and Construction SPD			
1.6	Service controls				
1.6.1	Service controls should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner.	ADM4(2)	✓	✓	
1.7	Wheelchair User Dwellings				
1.7.1	Ten percent of new housing should be designed to meet Building Regulation requirement M4(3) 'wheelchair user dwellings'.	The London Plan 2016 Policy 3.8	✓	✓	The scheme includes 21 M4(3) compliant units (10% of the total number of units).
		Draft New London Plan (DNLP) 2019 Policy D5			
		London Borough of Barnet (LBB) Core Strategy Development Plan Document (DPD) 2012 Policy CS4			
1.8	Private Open Space				
1.8.1	A minimum of 5sqm of private outdoor space should be provided for 1-2 person dwellings and an extra 1sqm should be provided for each additional occupant.	Mayor of London (MoL) Housing Supplementary Planning Guidance (SPG) 2017 Standard 26	✓	✓	All dwellings have access to private amenity that complies or exceeds the minimum area required.
		DNLP Policy D4			
1.8.2	Private outdoor spaces should have level access from the home.	ADM4(2)	✓	✓	All terraces / balconies have level thresholds.
1.8.3	The minimum depth and width of all balconies and other private external spaces should be 1500mm.	MoL Housing SPG Standard 27	✓	✓	All balconies and terraces achieve a minimum depth of 1500mm across the principal usable zone.
		DNLP Policy D4			

		SOURCE	BASELINE	GOOD PRACTICE COMPLIANCE	JUSTIFICATION
1.9	Privacy				
1.9.1	Design proposals should demonstrate how habitable rooms within each dwelling are provided with an adequate level of privacy in relation to neighbouring property and the street and other public spaces.	DNLP Policy D4 MoL Housing SPG Standard 28 LBB Sustainable Design and Construction SPD	✓	✓	Dwellings and amenity space positioned and distanced from each other to minimise overlooking. Façades positioned approx. 20m or over from surrounding building windows.
1.10	Dual Aspect				
1.10.1	Developments should avoid single aspect dwellings that are north facing, exposed to noise exposure categories C or D, or contain three or more bedrooms.	DNLP Policy D4 MoL Housing SPG Standard 28 LBB Sustainable Design and Construction SPD	✓	✓	No dwellings are both single aspect and north facing. No single aspect dwellings have 3 bedrooms or more.
1.11	Noise				
1.11.1	The layout of adjacent dwellings and the location of lifts and circulation spaces should seek to limit the transmission of noise to sound sensitive rooms within dwellings.	MoL Housing SPG Standard 30	✓	✓	Wall linings to lifts designed to prevent noise transfer by using independent stud construction.
1.12	Floor to Ceiling Heights				
1.12.1	The minimum floor to ceiling height in habitable rooms should be 2.5m between finished floor level and finished ceiling level.	DNLP Policy D4 MoL Housing SPG Standard 31 LBB Sustainable Design and Construction SPD	✓	✓	The minimum finished floor to finished ceiling height is 2.5m in habitable rooms.
1.13	Daylight and Sunlight				
1.13.1	All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight. Overheating to be considered when designing for sunlight.	DNLP Policy D4 MoL Housing SPG Standard 32 LBB Sustainable Design and Construction SPD	✓	%	Refer to Daylight / sunlight assessment
1.14	Air Quality				
1.14.1	Minimise increased exposure to existing poor air quality and make provision to address local problems of air quality; be at least 'air quality neutral' and not lead to further deterioration of existing poor air quality.	MoL Housing SPG Standard 33 DNLP Policy SI1 London Borough of Barnet (LBB) Development Management Policies (DPD) 2012 DM04	✓	✓	Refer to EIA.
1.15	Shared circulation				
1.15.1	Each core should be accessible to generally no more than eight units on each floor.	MoL Housing SPG Standard 12	✓	%	Typically, each core provides access to 9 units per floor.
1.15.2	Where dwellings are accessed via an internal corridors, the corridors should receive natural light and adequate ventilation where possible.	MoL Housing SPG Standard 14	✓	✓	All corridors are provided with ventilation and natural light next to the core.
1.15.3	All dwellings entered at the seventh floor and above should be served by at least two lifts	MoL Housing SPG Standard 15	✓	✓	2 lifts provided at each core.
1.15.4	It is desirable that every wheelchair user dwelling is served by more than one lift.	MoL Housing SPG Standard 16	✓	✓	2 lifts provided at each core.

		SOURCE	BASELINE	GOOD PRACTICE COMPLIANCE	JUSTIFICATION
1.16	Cycle Storage				
1.16.1	Provide dedicated cycle parking: 1 per studio, 1.5 per 1-bedroom 2-Persons, 2 per 2-bedroom or larger.	DNLP Policy T5 The London Plan Policy 6.13	✓	✓	Proposals comply with the Draft New London Plan requirements which exceed those of the current London Plan.
1.17	Waste and recycling				
1.17.1	Housing should be designed with adequate and easily accessible storage space that supports the separate collection of dry recyclables. Communal refuse stores to be accessible to all, including wheelchair users.	DNLP Policy D4 MoL Housing SPG Standard 22 LBB Sustainable Design and Construction SPD	✓	✓	Waste and recycling facilities designed in compliance with LA Guidance.
1.18	Environmental Performance				
1.18.1	All homes should satisfy London Plan policy on sustainable design and construction and make the fullest contribution to the mitigation of and adaptation to climate change.	DNLP Policy SI1 MoL Housing SPG Standard 34	✓	✓	Refer to EIA
1.19	Energy and CO2				
1.19.1	Development proposals should be designed in accordance with the London Plan energy hierarchy, and should meet the minimum targets for carbon dioxide emissions reduction.	DNLP Policy SI2 MoL Housing SPG Standard 35	✓	✓	Refer to EIA.
1.19.2	Overheating Development proposals should demonstrate how the design of dwellings will avoid overheating without reliance on energy intensive mechanical cooling systems.	DNLP Policy D4 MoL Housing SPG Standard 36	✓	✓	Refer to EIA.
1.19.3	Water New dwellings should be designed to ensure that a maximum of 105 litres of water is consumed per person per day.	DNLP Policy SI5 MoL Housing SPG Standard 37	✓	✓	Refer to EIA
1.19.4	Where development is permitted in an area at risk of flooding, it should incorporate flood resilient design in accordance with PPS25.	DNLP Policy SI12 MoL Housing SPG Standard 38	✓	✓	Refer to flood risk assessment
1.19.5	New development should incorporate Sustainable Urban Drainage Systems and green roofs where practical with the aim of achieving a Greenfield run-off rate. Surface water run-off is to be managed as close to source as possible.	DNLP Policy SI13 LBB Development Management Policies DM04	✓	✓	Refer to Drainage Report
1.20	Ecology The design and layout of new residential development should avoid areas of ecological value and seek to enhance the ecological capital of the area in accordance with GLA best practice guidance on biodiversity and nature conservation.	DNLP Policy G6 MoL Housing SPG Standard 40	✓	✓	Refer to EIA

* In ADM4(2) the entrance level of a dwelling is generally deemed to be the storey containing the main entrance door. Where there are no rooms on the storey containing the main entrance door (e.g. flats over garages or shops and some duplexes and townhouses) the first storey level containing a habitable or non-habitable room can be considered the entrance level, if this storey is reached by a stair providing 'easy access', as defined above.

∞ Dwellings over more than one storey with no more than two bedrooms may instead be designed with a Part M compliant WC at entrance level. The WC should provide a floor drain to allow for an accessible shower to be installed at a later date.

† Adequate fixing and support for grab rails should be available at any location on all walls within a height band of 300-1800mm from the floor.

5.0 Configuration and compliance

5.6 Inclusive design

This section of the Design and Access Statement details the philosophy and approach to inclusive and accessible design which has formed part of the development process and is reflected in the Plot A proposals.

The design aspiration for Grahame Park is the creation of an inclusive environment throughout, to be experienced by all residents, visitors, people working or using the commercial space and the wider community, including those with disabilities. This approach considers the requirements of all users; notably those with mobility impairments, blind or partially sighted and people with difficulty of hearing.

In doing so it also considers the needs of older people and those with small children. The result is a development that maximises independence, comfort and dignity for residents and visitors alike.

The inclusive design strategy aims to fulfil the following set of goals:

- To maximise access to all parts of the development, its services and facilities as required by local, regional and national policy;
- To ensure that appropriate standards for accessibility are met at the outset and as part of mainstream inclusive design wherever possible;
- To design inclusively, which means designing beyond the minimum requirements of the Building Regulations Part M, to ensure that all people, regardless of age, sex or ability can use and enjoy the built environment;
- To address the anticipated increase of older people in proportion to the working class population in the near future and their needs;
- To meet the aims of the Equality Act, where applicable; and
- To follow design guidance given in relevant British Standards and other currently published good practice guidance about meeting the needs of disabled people.

Design standards

Plot A has been developed with reference to the following standards:

- The Equality Act 2010;
- Building Regulations 2015 + 2016 amendments Approved Document M: access to and use of buildings;
- Building Regulations 2013 Approved Document K: protection from falling, collision and impact;
- British Standard BS 8300-1:2018: Design of an accessible and inclusive built environment. External environment - code of practice;
- British Standard BS 8300-2:2018: Design of an accessible and inclusive built environment. Buildings - code of practice;
- British Standard BS 9266:2013: Design of accessible and adaptable general needs housing - code of practice;
- National Planning Policy Framework 2019 (NPPF), Ministry of Housing, Communities & Local Government (MHCLG);
- The Draft New London Plan (2019);
- The Mayor of London Housing SPG (2017);
- Mayor of London Accessible London SPG (2014);
- MHCLG Technical Housing Standards (2016);
- London Borough of Barnet Core Strategy (2012);
- London Borough of Barnet Development Management Policies (2012);
- London Borough of Barnet Sustainable Design and Construction SPD (2016);
- London Borough of Barnet Residential Design Guidance SPD (2016);
- Department for Transport Inclusive Mobility (2005); and
- Notting Hill Genesis design brief.

Interpretation of design standards

There are various legislative and guidance documents detailing inclusive accessible design, which is often open to interpretation, and where comparisons are drawn they identify a range of anomalies. Access guidance documentation is often built upon other relevant access guidance. There is no single key guidance document stipulating the requirement for all criteria to be met. Ultimately this results in individual judgement being applied to the implementation of inclusive design and the extent to which good practice should be followed. For example, BS 8300:2018 is a widely referenced document, and much of the Building Regulations Approved Document M is based upon it, however there are other more specific design guidance documents that need to be considered in the design process.

This statement makes reference to the various accessible design standards and explains how they have been taken into account in the proposed design of the scheme.

Development overview

Grahame Park Plot A will provide:

- 10% dwellings to be ADM4(3) compliant;
- 90% dwellings to be ADM4(2) compliant;
- Balconies designed in compliance with ADM and GLA standards;
- All wheelchair accessible dwellings located in upper floors to be served by two lifts;
- Public realm to be wheelchair friendly, including the residential courtyards at first floor;
- Public realm to be suitable for those visually impaired;
- Accessible housing to be delivered across both tenures and in a range of different sizes;
- All homes in the Social Rent tenure to be fully accessible allowing for immediate occupation, and homes in the Affordable Shared Ownership to be easily adaptable in accordance with the provisions in ADM4(3);
- Accessible parking bays to be provided as close as possible to ADM4(3) compliant dwellings; and
- Enlarged cycle parking to be provided within the cycle stores of each block and accessible to use by residents regardless of dwelling size, tenure or accessibility level.

5.7 Communal spaces and access routes

The approach routes to the residential cores are designed to be inclusive, with gentle gradients, suitably paved surfaces and good lighting levels. Unlike the existing estate where external steps are provided in several locations, the proposed scheme does not include any external stepped or ramped access routes.

Communal routes have been designed to comply with applicable Building Regulations, the Mayor of London Accessible London SPG and the Draft New London Plan, in particular with clause 3.5.2 of the DNLP (Policy D5):

“Where any part of an approach route including the vertical circulation in the common parts of a block of flats is shared between dwellings of different categories (i.e. M4(2) and M4(3)), the design provisions of the highest numbered category of dwelling served should be applied, to ensure that people can visit their neighbours with ease and are not limited by the design of communal areas.”

Lifts and stairs

All cores comprise two lifts, for back-up in case of temporary failure or maintenance. Both lifts are sized to accommodate at least a manual or electrically powered wheelchair and one accompanying person as set out in Table 4 of BS8300-2:2018. One of the lifts at each core is sized to 13-Person capacity, increasing flexibility.

During detail design stage, careful consideration will be given to the finishes and design of the lifts to ensure they are not only suitable for those with low mobility but also for users which are hard of hearing, or visually impaired by providing measures such as sound announcements and adequate contrast and lighting. Lift landings at all floors provide a 1500x1500mm clearance zone directly outside the lift and free of any door swings.

All common stairs will be designed in accordance with ADK, with dimensions that suit ambulant disabled people and visual contrast to aid partially sighted users. Handrails will be installed at 900mm above nosings, and will extend 300mm beyond the top and bottom riser, with a closed loop to prevent clothing from being caught.

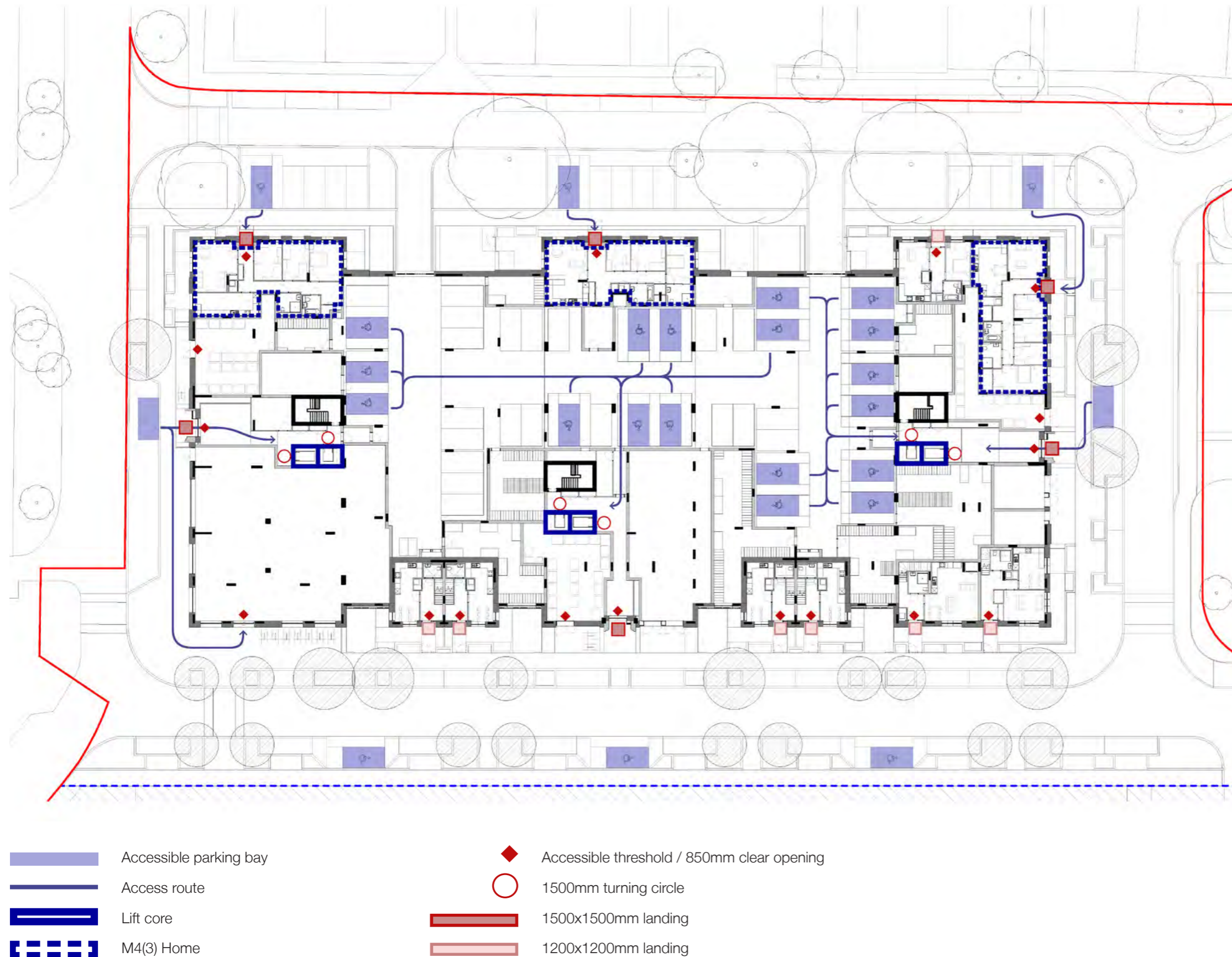


Figure 5.31: Ground floor plan: accessibility

5.0 Configuration and compliance

Entrances and circulation

Any internal access route is a minimum 1200mm wide and all lobbies provide a minimum 1570mm distance between door swings. Entry systems such as video or audio entry systems, fobs or similar are to be designed and located so that they are usable by all visitors and residents. They are to be mounted at an appropriate height and be possible to be activated with a closed fist and using minimal force.

Communal entrances will be fitted with double doors, each providing a minimum 850mm clearance and designed to provide accessible thresholds.

Internal corridors giving access to apartments will be typically 1500mm wide to facilitate circulation and never below 1200mm.

The commercial unit will be subject to tenant fit-out but it is expected to be compliant with Building Regulations Approved Documents M and K.

Courtyard gardens

The communal gardens at first floor have been designed to comply with the Mayor of London Housing SPG (**Standard 4**) which requires that communal open space "is accessible to disabled people including people who require level access and wheelchair users."

Access to the gardens will be step free via the communal core and available to all residents of the upper floors. Homes at first floor with private terraces will also have level access into the courtyard from their terraces. All access points to the courtyards will be provided with accessible thresholds of suitable width in accordance with the requirements of Approved Document M.

All residential external doors will provide a minimum clearance width of 850mm. External routes within the courtyard will be provided with spaces for 1500mm diameter turning circles at regular intervals for ease of circulation and choice of turning points. These areas are integrated into the design in a natural way rather than defined, following the principles of inclusive design.

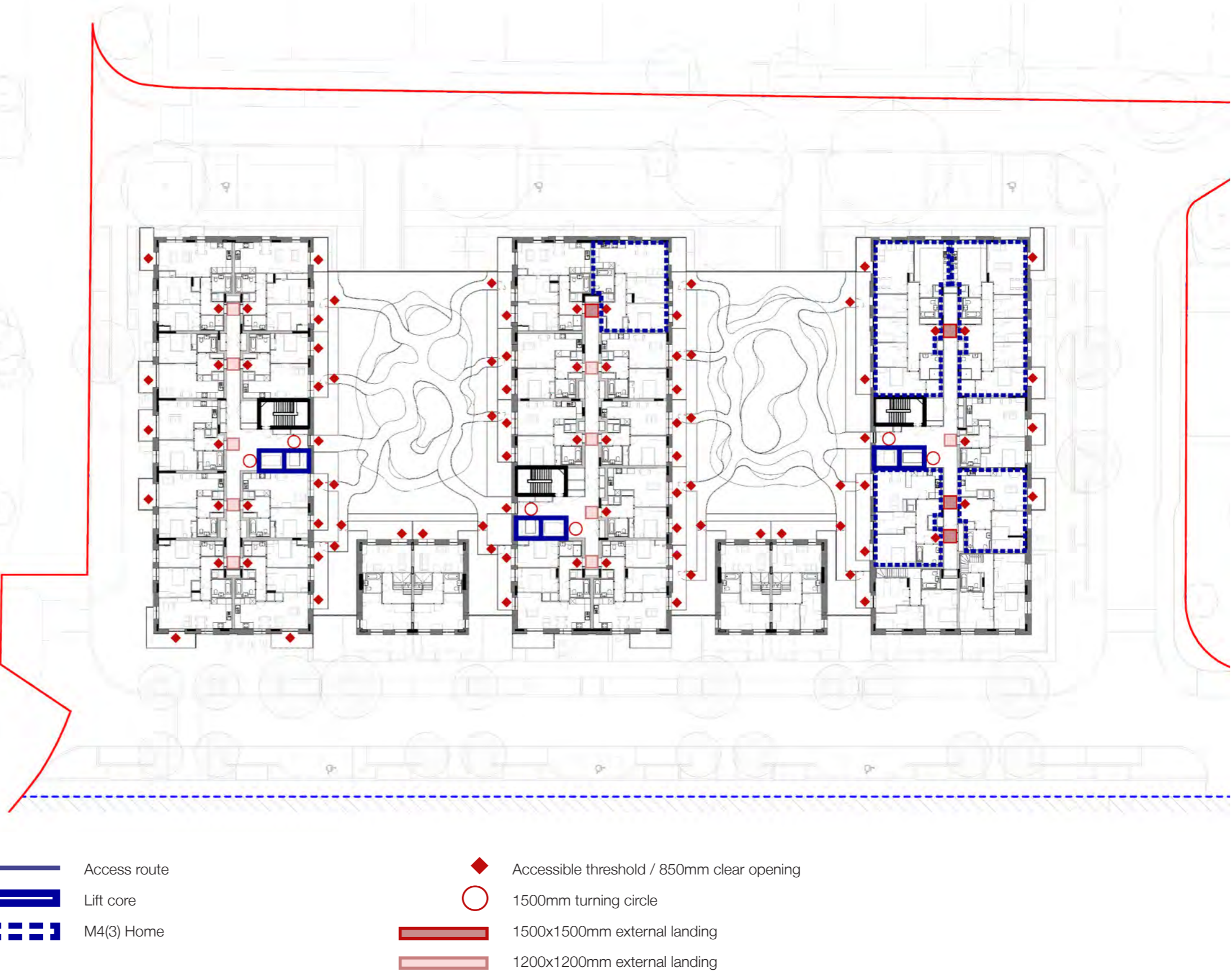


Figure 5.32: First floor plan: accessibility

5.8 Approved Document M4(2) compliance

90% of the dwellings provided in the Grahame Park detailed component will be compliant with “Approved Document M4(2): Category 2 - accessible and adaptable dwellings”, in accordance with **Policy 3.8** of the London Plan, **Policy D5** of the Draft New London Plan and **Section 2.6** of the London Borough of Barnet Sustainable Design and Construction SPD.

Typical internal layouts are provided in this section to illustrate how the design of private spaces within the dwellings has met the requirements of Approved Document M4(2), in addition to the internal layouts available in Chapter 5.4 and which include multi-storey homes.

The internal layouts of M4(2) homes have been designed to comply with and exceed access regulations. Flats are typically provided with open space living / dining / kitchen arrangements which reduces the number of doors to be negotiated by the user. Circulation routes between and around furniture within living spaces and bedrooms are a minimum of 750mm wide and allow an access route to at least the principal openable window and balcony doors.

All homes have an accessible bathroom located in the same floor as the main bedroom, with walls capable of supporting the installation of grab rails. These bathrooms will also be installed with capped drainage beneath the bath to enable future fitting of a level access shower. In dwellings of 2 or 3 storeys, a WC or shower room is provided at the entrance storey which can be adapted to provide a level access shower. All doors to bathrooms, ensuites, shower rooms or WCs open outwards.

All homes have access to external amenity in the form of a balcony or private terrace. External doors will have a minimum of 850mm clearance and a 300mm nib on the pull side extending by at least 1200mm. Balconies and terraces are a minimum 1500mm wide and at least one is accessible from the living areas.

Windows have transoms at 1100mm typically to provide protection from falling in accordance with the requirements of Approved Document K. These are complemented with full height glazed panels in living rooms and some of the bedrooms, as well as glazed doors to balconies, allowing for clear views out from a seated position from all living rooms.

Switches, controls and other devices will be located at a height between 450mm-1200mm above floor level and at a minimum 300mm distance from room corners.



- A** Entrance door: 850mm min. clear width
- B** External door: 850mm min. clear width
- C** Internal door: 775mm min. clear width
- D** 750mm clear to bed
- E** Corridor: min. 1050mm wide
- 1500mm turning circle

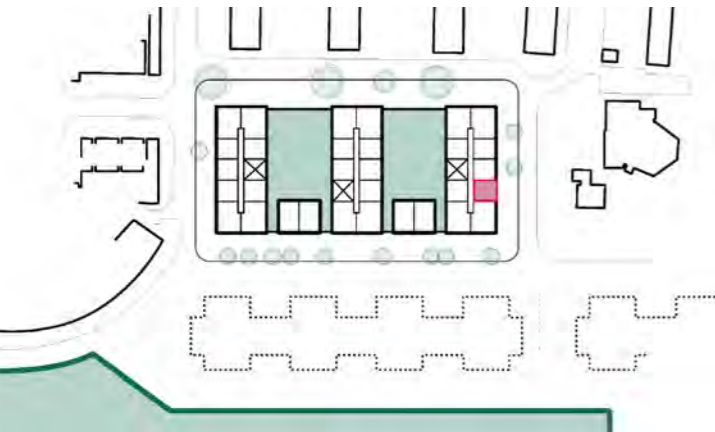


Figure 5.33: Typical 1 Bedroom 2 Persons layout (Social Rent)

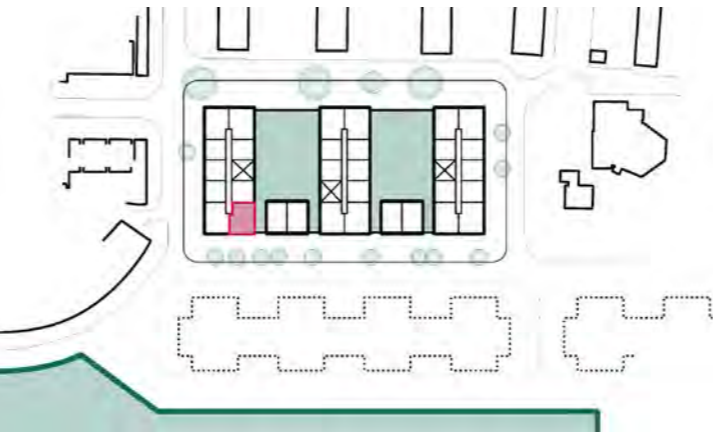
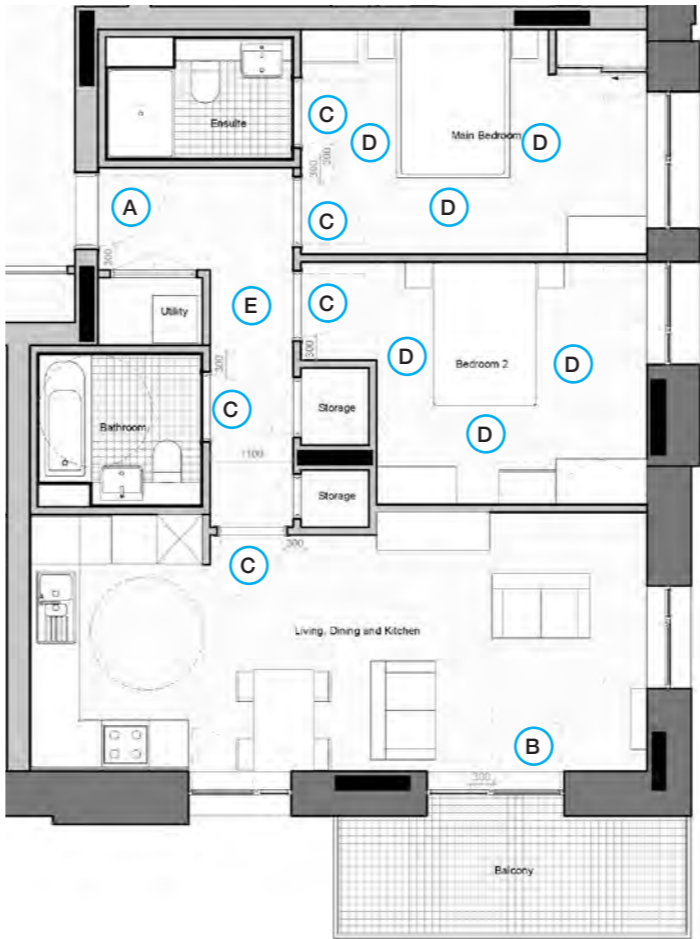


Figure 5.34: Typical 2 Bedroom 4 Persons layout (Shared Ownership)

5.0 Configuration and compliance

5.9 Approved Document M4(3) compliance

10% of dwellings provided in the Grahame Park detailed component will be compliant with “Approved Document M4(3): Category 3 - Wheelchair user dwellings”, a total of 21 homes.

Nine 2-Bedroom 3-Person accessible homes are provided within the Shared Ownership tenure, located in A2 and accessible via the communal core. These have been stacked for efficiency of services and will be provided as wheelchair adaptable.

The remaining twelve accessible homes are within the Social Rent tenure, distributed between A1, A2 and A3. The majority of these are located at ground and first floors and all are single storey homes.

The mix includes 1-bedroom, 2-bedroom, 3-bedroom and 4-bedroom dwellings, all wheelchair accessible. Typical internal layouts are provided in this section to illustrate how the design meets the requirements of Approved Document M4(3).

All communal corridors serving accessible homes are 1500mm wide, and entrance doors into dwellings provide the minimum 850mm clear width. All thresholds will be level and external doors to balconies will provide the same clearance width. Internally, the entrance area is a minimum of 1500mm wide and over 1800mm deep. The wheelchair storage space is located as close to the entrance as possible and will be provided with a power socket.

Internal corridors are typically 1200mm wide with doors providing 850mm clear width for both straight-on or 90 degree approach. Bathrooms will have outward opening doors. In large homes of 5+ occupancy a fully fitted shower room with provision for level access shower and a bathroom are both provided on the same floor. Where the shower room is fully accessible the bathroom can be provided as a cat. 2 bathroom. All accessible bathrooms and shower room walls are designed to support grab rails.

Bedrooms provide 1000mm clearance to the side of the bed (both sides and foot of the bed in main bedrooms) and in front of all furniture. Bedrooms also provide 1200x1200mm activity zones as required by ADM.

Kitchens are designed with a minimum of 1500mm clear in front of all units, and worktop lengths as required by ADM for the various occupation sizes. The kitchen layouts allow for a lowerable section of worktop to be fitted at the outset at accessible homes, either as a single run or corner arrangement.

All living rooms are provided with full height glazing to the balconies, allowing views out from a seated position.

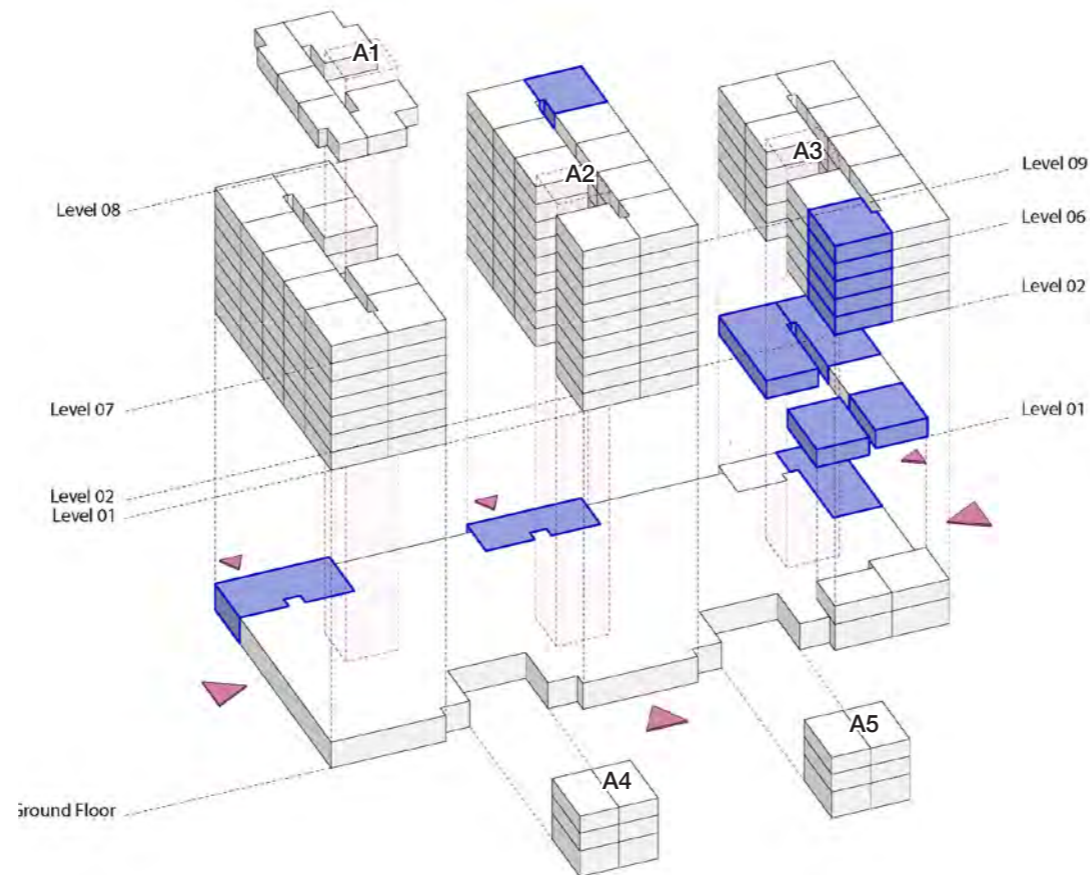
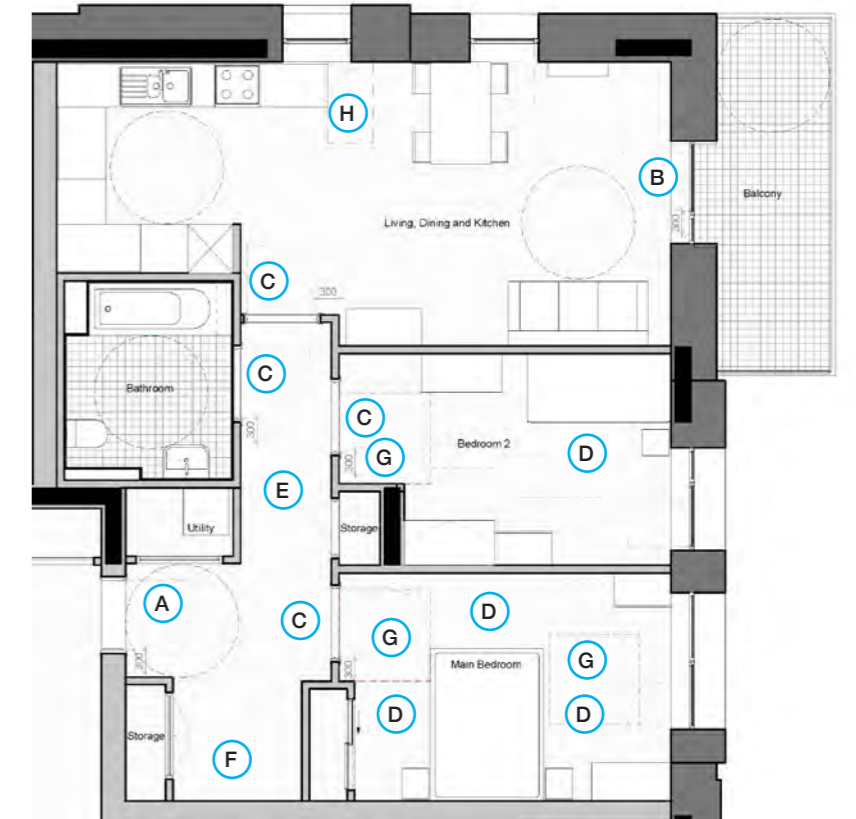
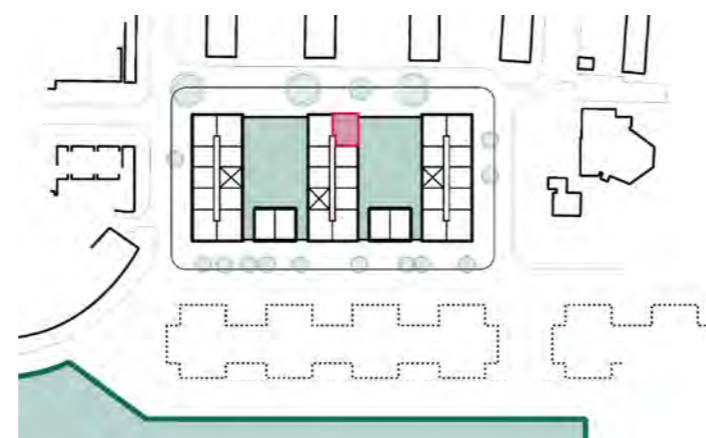


Figure 5.35: Diagram showing the location of accessible homes.



- (A) Entrance door: 850mm min. clear width
- (B) External door: 850mm min. clear width
- (C) Internal door: 850mm min. clear width
- (D) 1000mm clear to bed
- (E) 1200mm min. corridor width
- (F) Wheelchair storage space and access zone
- (G) 1200x1200 activity area
- (H) Space for additional kitchen units
- (Red dashed circle) 1500mm turning circle

Figure 5.36: Typical 2 Bedroom 3 Persons adaptable layout (Shared Ownership)

- A Entrance door: 850mm min. clear width
- B External door: 850mm min. clear width
- C Internal door: 850mm min. clear width
- D 1000mm clear to bed
- E 1200mm min. corridor width
- F Wheelchair storage space and access zone
- G 1200x1200 activity area
- 1500mm turning circle

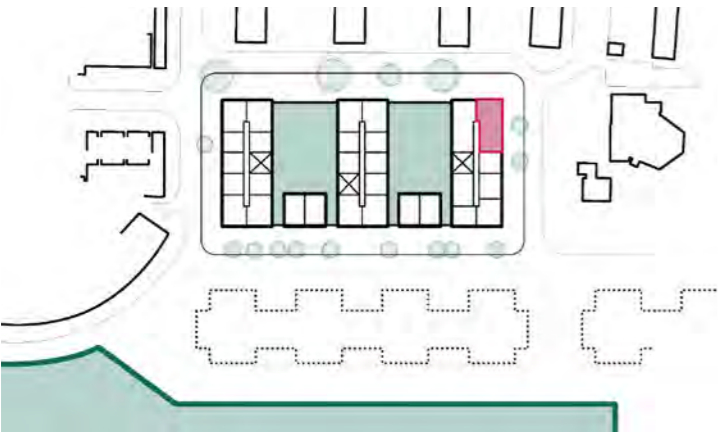
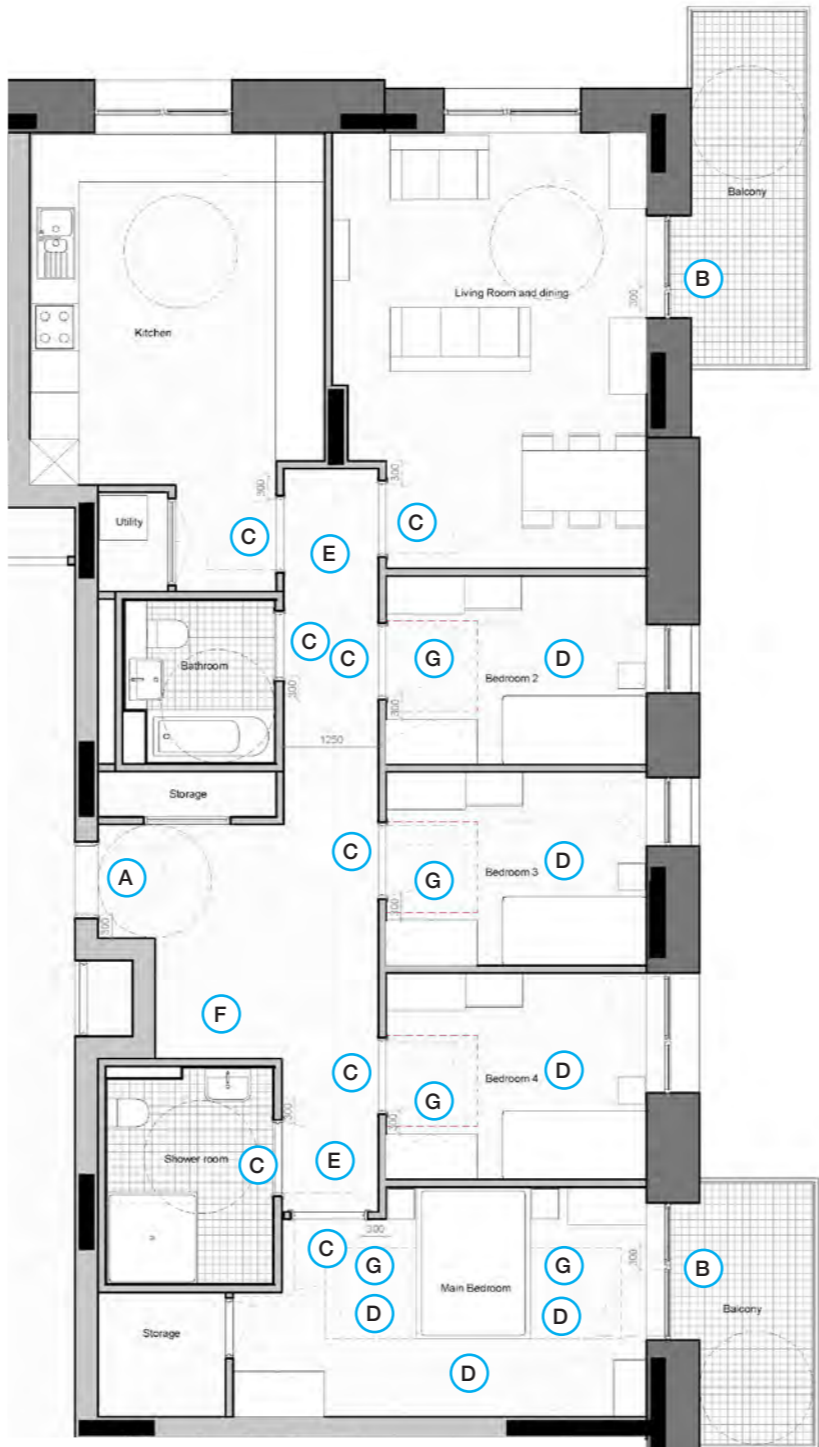


Figure 5.37: Typical 4 Bedroom 5 Persons accessible layout (Social Rent)

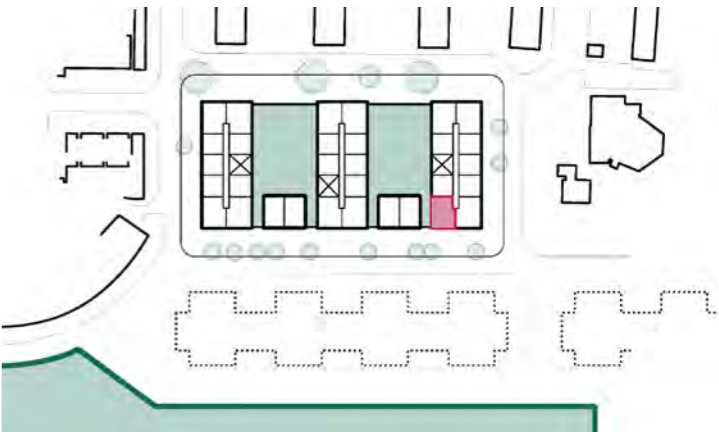
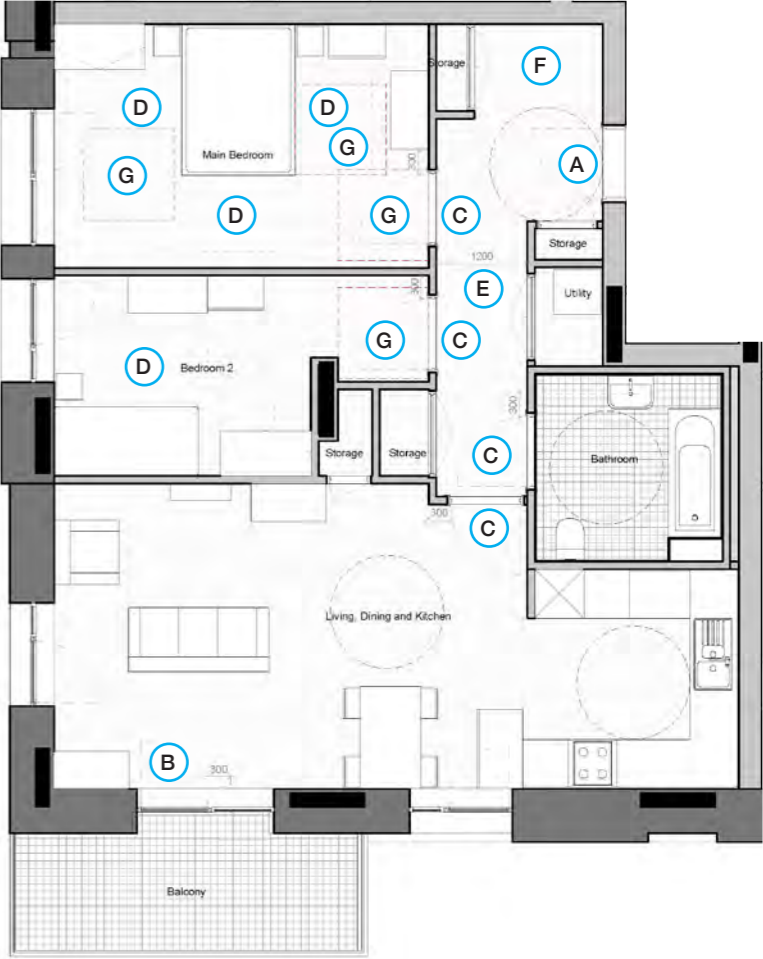


Figure 5.38: Typical 2 Bedroom 3 Persons accessible layout (Social Rent)

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