

Chapter 4: The Proposed Development

INTRODUCTION AND OVERVIEW OF THE PLANNING APPLICATION

- 4.1** This chapter of the ES presents a description of the Proposed Development sought for approval. It provides relevant and sufficient information on the Proposed Development to aid the identification and assessment of potential impacts and likely effects across the technical topic areas addressed within the EIA as presented within **ES Volume 1, Chapters 6 – 14 and ES Volume 2, Townscape, Visual Impact and Heritage Assessment.**
- 4.2** Further details on the Aberfeldy Village Masterplan, referred to as the Proposed Development, can be found within the Design & Access Statements (DAS) and both the detailed plans and parameter plans that have been submitted in alongside the planning application which is both detailed and outline.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

Overview of the Proposed Development

- 4.3** The Proposed Development will provide a mixed-use residential scheme comprising 24 buildings of varying height comprising:
- Up to 1,628 residential units Residential (Class C3) of which 277 units will be in detail and up to 1,351 units will be in outline¹;
 - Retail, workspace, food and drink uses (Class E);
 - Car and cycle parking;
 - Formation of new pedestrian / cycle route through the conversion of the existing vehicular underpass;
 - Landscaping including open spaces and public realm; and
 - New means of access, associated infrastructure, and highway networks.
- 4.4** The 16 building plots (see **Figure 4.1**) comprise 24 buildings referred to as Buildings A- J The height of the Proposed Development varies across the 24 buildings from 2 stories to 28 stories. The Proposed Development comprises one basement below Building Plot B3.
- 4.5** A significant new public open space will be created at the centre of the site with good connections to existing public open spaces to the east and west, with improvements to public open spaces within the redline boundary. The proposed public realm will comprise up to 10,854m² across the site (including both existing and new open space). A total of 4,439m² of communal amenity will be provided across the Proposed Development. Public realm works will lie within Phase A, the detailed proposals of the Proposed Development.
- 4.6** A new access point to facilitate the Proposed Development from the A12 onto Abbott Road will be provided. This will include a proposed right turn bus gate at the new A12/Abbott Road junction. Changes to the A12 / Lochnagar Street junction will be provided as an additional northbound approach lane. Improvements to the existing Dee Street subway will also be provided. In addition, the pedestrianisation of Abbott Road vehicular underpass will deliver an enhanced pedestrian and cycle connection from Aberfeldy to the west of the A12 via the pedestrianisation of the existing vehicular underpass.
- 4.7** The Proposed Development will deliver an enhanced pedestrian and cycle connection from Aberfeldy to the west of the A12 via the pedestrianisation of the existing vehicle underpass. The Aberfeldy New Village LLP ('the Applicant') is aware that there are aspirations for enhancement works to be undertaken at Jolly's Green which include a desire for a direct route to it via the proposed new underpass. The Proposed Development does not include these works to Jolly's Green and the rationale for that is set out in the Planning Statement. However, in order to appraise the context of the Proposed Development the Applicant has considered an illustrative scheme for works to Jolly's Green – both to show a new connection directly to it and also wider

enhancement works to the park itself. The Applicant is however willing to work with the Council and other relevant stakeholders to consider how these works might be delivered in the future and further detail on that is set out in the Planning Statement. The Applicant is aware that there are aspirations for enhancement works to be undertaken at Jolly's green however, the Proposed Development does not include these works at Jolly's Green. The Proposed Development will include key proposed public open space throughout the Proposed Development.

- 4.8** A planning obligation is proposed as part of the Section 106 Agreement for this hybrid application to secure the re-provision of The Aberfeldy Islamic and Cultural Centre and Mosque. The Section 106 Agreement associated with the Extant Permission required the Faith Centre's re-delivery and thus it is proposed that this is transposed to the new Section 106 Agreement. The existing GP Practice at 2a Etrick Street will be re-provided under phase 3b of the Extant Permission within a new, larger Health Centre. Therefore, as this building will be vacant and at the heart of the Masterplan and in close proximity to the new Town Square, the Applicant is currently exploring the Faith Centre's relocation as part of a future change of use application.
- 4.9** The Proposed Development will provide car parking provision onsite. This will be provided on street and within three podium car parks. Some existing residents have a right to car parking and this parking will be re-provided as part of the Proposed Development. Where possible, car parking will be designed to allow repurposing in the event of a shift away from car use, rendering car parking surplus to requirement. Provision for electrical car charging points will also be made.
- 4.10** The Proposed Development will be built out in four phases. Phase A is in detail whilst outline permission is sought for Phases B, C and D of the planning application (areas within the detailed and outline elements of the application are presented within **Figure 4.1**).
- 4.11** Further details of the phased delivery and subsequent occupations of the Proposed Development is provided within **ES Volume 1, Chapter 5: Demolition and Construction.**
- 4.12** The Buildings which are to be included within Phase A (detailed) include:
- Building Plot F,
 - Building Plots H1-2 / Building Plot H3,
 - Building Plot I and
 - Building Plot J.
- 4.13** The outline elements of the application comprise the following plots (refer to **Figure 4.1 and Figure 4.2**):
- Building Plots A1-2;
 - Building Plots C1-4;
 - Building Plot A3;
 - Building Plot C5;
 - Buildings Plots B1-2;
 - Building Plot C6;
 - Building Plots B3, B4;
 - Building Plots D1-4 and
 - Building Plot B5;
 - Building Plots E1-3.

Parameter Plans

- 4.14** Outline permission is sought for the majority of the Site, specifically Phase B-D of the Aberfeldy Village Masterplan, with all matters reserved for future consideration. The planning application is accompanied by a set of Control Documents (Parameter Plans and a Design Code) for Phase B-D. The Control Documents build in a sufficient level of flexibility into the design to allow for detailed designs to come forward with the Reserved

¹ For the outline proposals, a minimum number of units has not been established. The EIA assesses a worst-case scenario for potential environmental effects, which in the case of residential uses would derive from a maximum number of units and the resulting maximum number of new residential occupants. However, the assessment of on-Site employment and housing provision once the Proposed Development is completed

and occupied is based on the proposed illustrative area schedule and the associated land uses as explained in **ES Volume 1, Chapter 2: Methodology.** The Illustrative schedules used as part of the socioeconomic assessment provided within this chapter.

Matter applications. The following Plans and Parameter Plans (Table 4.1) describe the existing Site and the Proposed Development:

Existing Site Plans / Parameter Plans	
Site Location Plan	Parameter Plan - Principal Public Realm Areas
Existing Site Plan	Parameter Plan - Access and Circulation
Existing Buildings Plan	Parameter Plan - Land Use Basement
Existing Site Levels	Parameter Plan – Land Use – Lower Ground Floor
Existing Site Sections	Parameter Plan - Land Use - Upper Ground Floor
Demolition Plan	Parameter Plan - Land Use - First Floor
Indicative Construction Phasing	Parameter Plan - Land Use – Upper Floors
Parameter Plan - Outline and Full Application Areas	Parameter Plan – Building Heights
Parameter Plan - Building Plots	Parameter Sections 01
Parameter Plan - Proposed Site Levels – Lower Ground Floor	Parameter Sections 01
Parameter Plan - Proposed Site Levels – Basement Level	

Design Code

4.15 The Design Code has been prepared to provide a series of illustrated rules and standards which will guide the future phases of the development of the Site. The Design Code has been produced to:

- Ensure high quality design and the development of a sustainable community;
- Define the public realm spaces and hierarchy of the development plots for the buildings in the masterplan;
- Define the character of the physical environment and the requirements on the proposed plots and buildings to support and reflect that character;
- Provide a level of consistency so the Site as a whole is developed in a coherent manner in line with the masterplan vision and design principles;
- Ensure accessible and inclusive design for all; and
- Communicate masterplan requirements for future reserved matters application(s) for individual development proposals over the life of the Proposed Development.

Figure 4.1 Building Plots and Construction Phasing

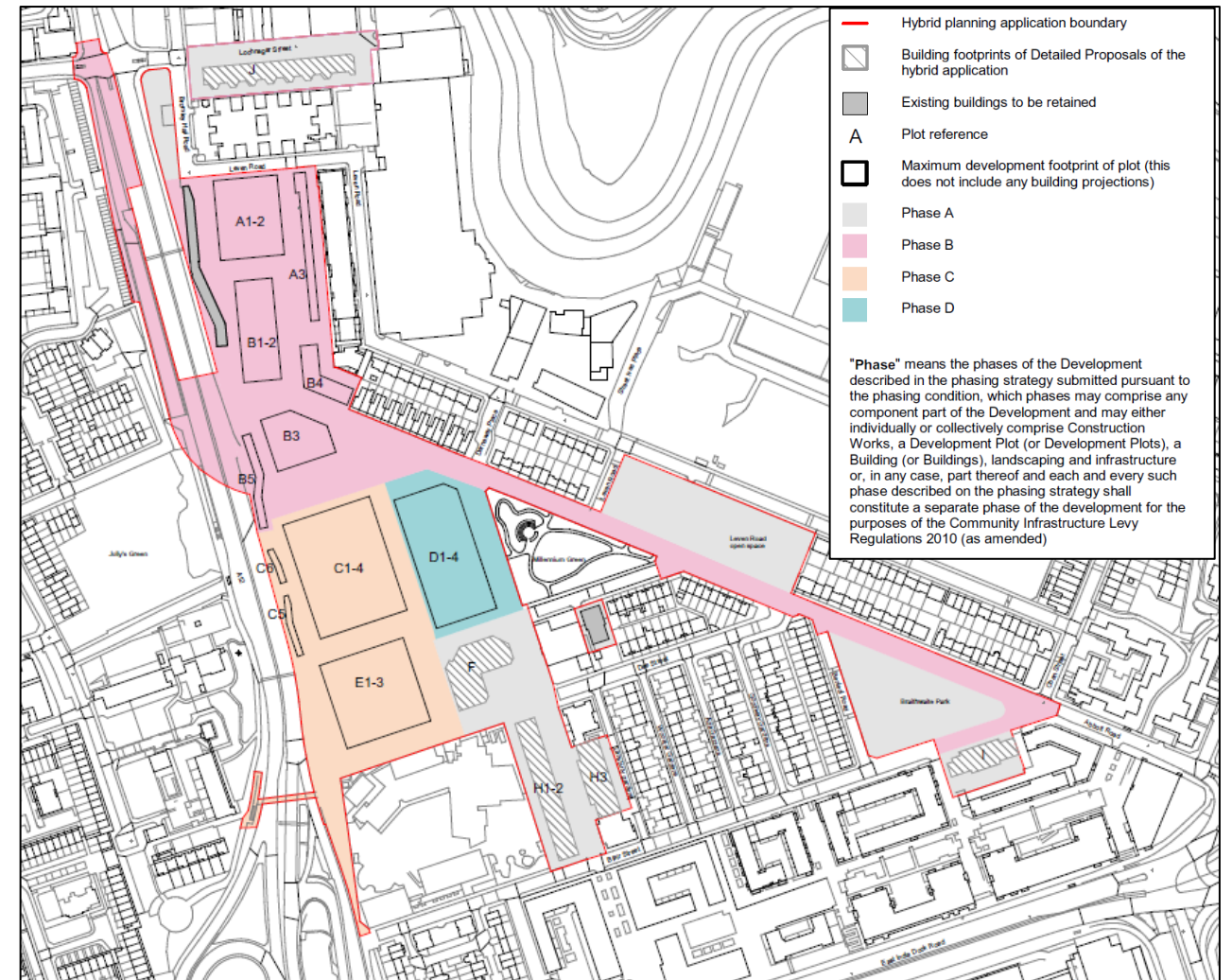
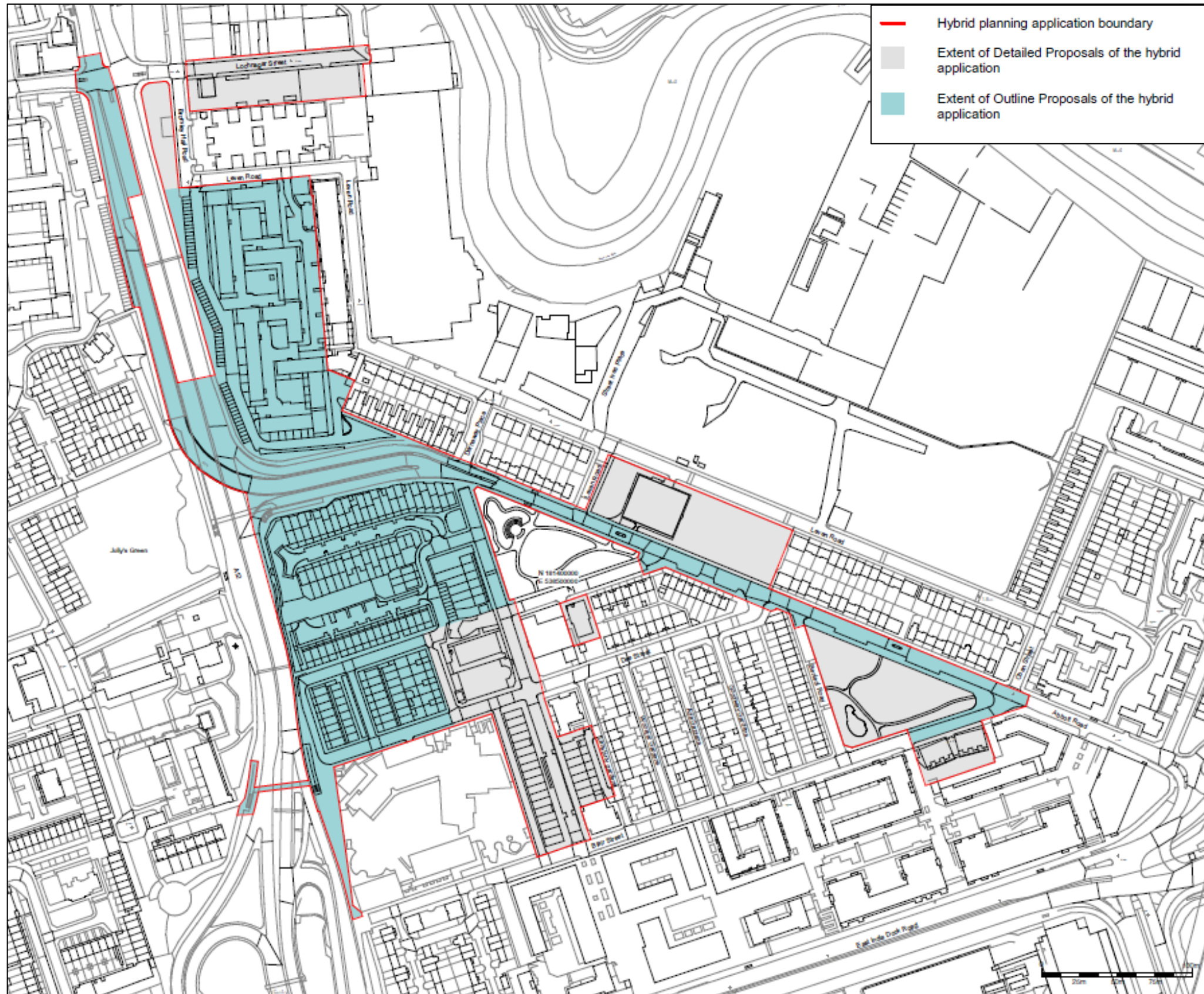


Figure 4.2 Extent Of Outline and Detailed Planning Application



QUANTUM OF DEVELOPMENT

Maximum Amount of Development

- 4.16** In terms of the land uses proposed and the amount or 'quantum' of development, the planning application either specifies the amount of development proposed for each land use class for the detailed proposal or specifies an 'up to maximum' amount of development for each land use class proposed for the outline proposals. This builds in a degree of flexibility for the future detailed design of the outline part within a site wide maximum.
- 4.17** The EIA has assessed the fixed / detailed massing and quantum of development for those aspects of the Proposed Development that fall within the detailed proposals of the planning application (i.e. Phase A). For the outline proposals of the planning application (i.e. Phases B-D) a minimum number of units has not been established. The EIA assesses a worst-case scenario for potential environmental effects, which in the case of residential uses would derive from a maximum number of units and the resulting maximum number of new residential occupants. However, the assessment of on-Site employment and housing provision once the Proposed Development is completed and occupied is based on the proposed illustrative area schedule (Table 4.14 and Table 4.15) and the associated land uses as explained in ES Volume 1, Chapter 2: Methodology. An overview of the maximum amount of development sought for approval is presented in **Table 4.2** as Gross Internal Area (GIA) and Gross External Area (GEA). **Table 4.3** and **Table 4.4** provide the land use areas broken down by Phase A (detailed) and Phase B, C and D (outline) (GEAm²).

Table 4.2 Maximum Amount of Development for the Hybrid Application

Land Use	GIA (m ²)	GEA (m ²)
Residential	150,606.5	166,703.2
Workspace	2702.3	3,199.4
Retail	2,366.2	2,585.7
Marketing	295	317
TOTAL	155,970	172,805.3

Table 4.3 Proposed Land Uses and Amount of Development – Detailed Proposals

Use Class	Detailed Part GEA (m ²)
Residential	30,133
Retail	1,341
Marketing	317
TOTAL	31,791

Table 4.4 Proposed Land Uses and Maximum Amount of Development – Outline Proposals

Use Class	Outline Part GEA (m ²)
Residential	132,413.6
Residents' Hub	1,557.6
Car Park (podium)	2,599
Workspace	3,199.4
Retail	1,244.7
TOTAL	141,014.30

Residential Unit Numbers and Tenure Mix

- 4.18** The Proposed Development will provide for up to 1,628 residential units across a range of tenure types and unit sizes. **Table 4.5** and **Table 4.6** presents the proposed residential unit mix and tenure types across the Detailed and Outline Proposals of the Proposed Development.
- 4.19** Phase A of the Proposed Development will provide 37 accessible homes whilst phases B-D will up to 120 accessible homes, equating to a total of 10% of homes which are to be accessible across the Proposed Development (combination of homes across Phases A-D).

Table 4.5 Detail Proposals – Residential Unit Mix

Unit Type	No. of Private	No. of Socially Rented	No. of Intermediate	Total
Studio	12	-	-	12
1 Bedroom	70	10	1	81
2 Bedroom	90	24	10	124
3 Bedroom	9	30	-	39
4 Bedroom	-	17	-	17
5 Bedroom	-	-	-	-
6 Bedroom	-	4	-	4
TOTAL	181	85	11	277

Table 4.6 Outline Proposals – Illustrative Housing Mix

Unit Type	No. of Private	No. of Socially Rented	No. of Intermediate	Total
Studio	102	-	-	102
1 Bedroom	406	81	44	531
2 Bedroom	494	66	26	586
3 Bedroom	13	106	-	119
4 Bedroom	-	12	-	12
5 Bedroom	-	-	-	0
6 Bedroom	-	-	-	1
TOTAL	Up to 1015	Up to 226	Up to 70	Up to 1,351

LAYOUT, MASSING AND SCALE

- 4.20** The Proposed Development layout is illustrated in **Figure 4.1**. The Proposed Development consists of primarily residential land use, ground floor flexible commercial, business and workspace uses as well as provision for new and improved public realm areas across the Proposed Development.
- 4.21** Maximum building heights vary across each plot of the Proposed Development (see Figure 4.8). The heights within the Proposed Development range between up to 9m AOD2 and 100m AOD2. The maximum building heights for each phase are summarised within **Table 4.7**. Building heights for each plot of the Proposed Development are expressed in AOD and are shown in Parameter Plan - Building Heights.
- 4.22** Building heights for Phases B-D, the outline proposals, are taken from Parameter Plan - Building Heights. These heights illustrate the limits of vertical deviation for the outline proposals of the Proposed Development.
- 4.23** The buildings designed in detail are of lower massing compared to that of the outline buildings in order to align with the existing surrounding context towards the south of the Site.
- 4.24** The tallest of the buildings are located along Enterprise Yard adjacent to the A12 (**Figure 4.8**). Medium buildings across the Proposed Development have been positioned along Aberfeldy Street, Millennium Green and The Square (Figure 4.8). Smaller rise buildings are located around perimeter of the Site and these have

been designed to fit into the existing surroundings. Medium buildings will provide key areas of public realm across the Proposed Development.

4.25 The massing of the Proposed Development has been purposefully stepped up in height to the north and west to minimise impacts to the existing residential properties and St Nicholas Church.

4.26 A selection of cross sections been provided as part of the parameter plans being submitted alongside the outline proposals of the planning application; these are shown in **Figures 4.3-4.7**.

Figure 4.3 Parameter 01 - Section 01

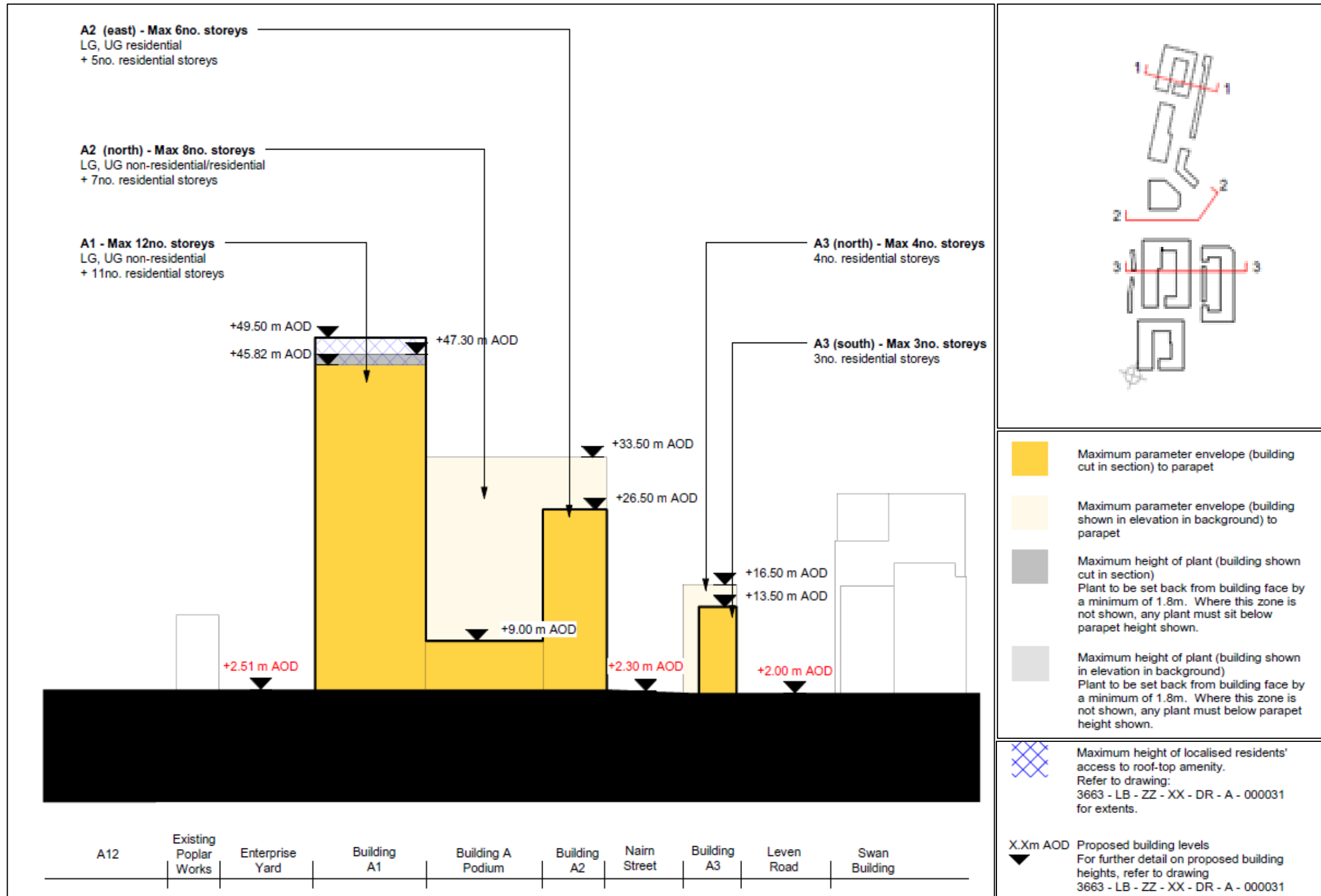


Figure 4.4 Parameter 01 - Section 02

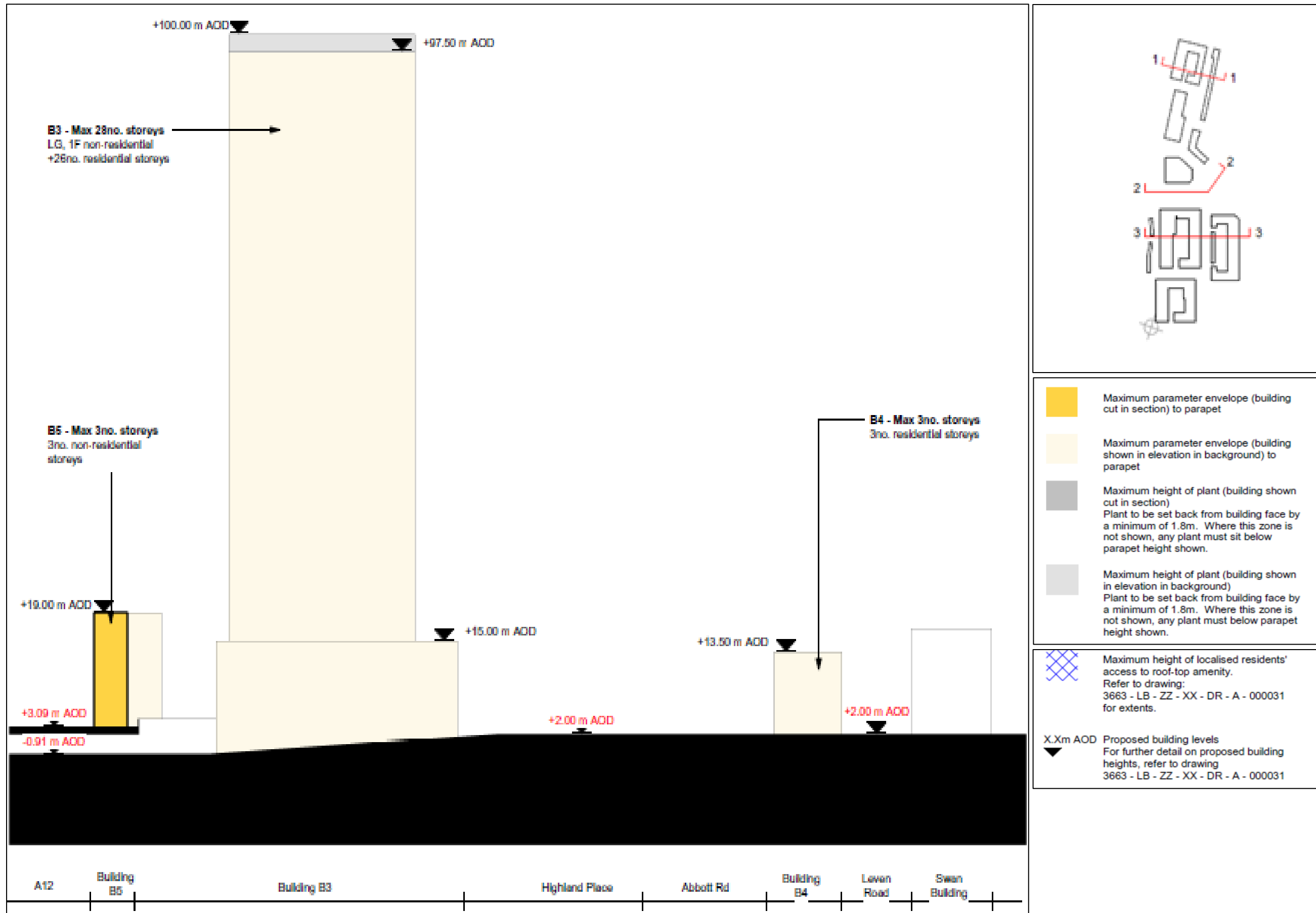


Figure 4.5 Parameter 01 - Section 03

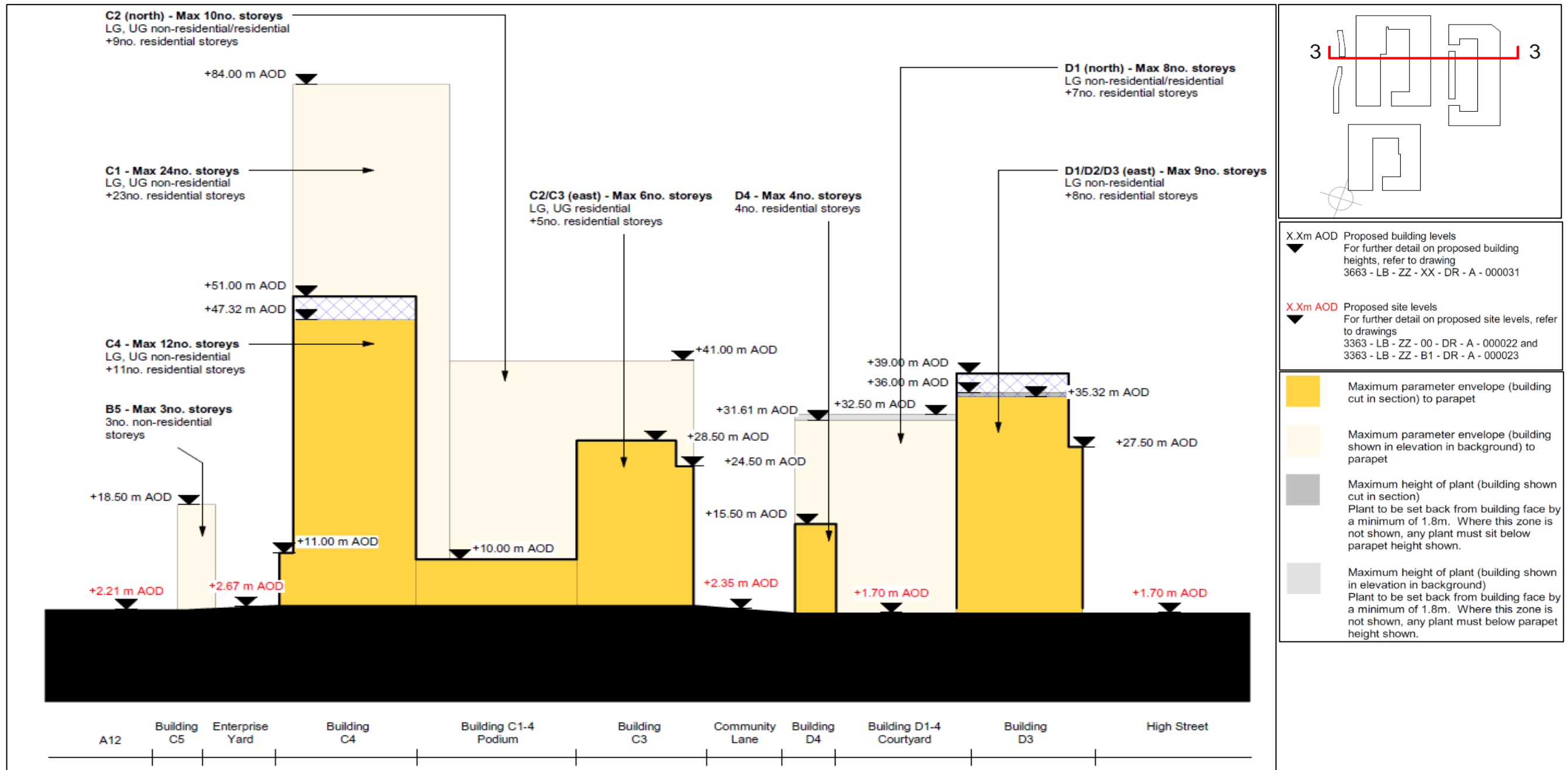


Figure 4.6 Parameter 02 – Section 01

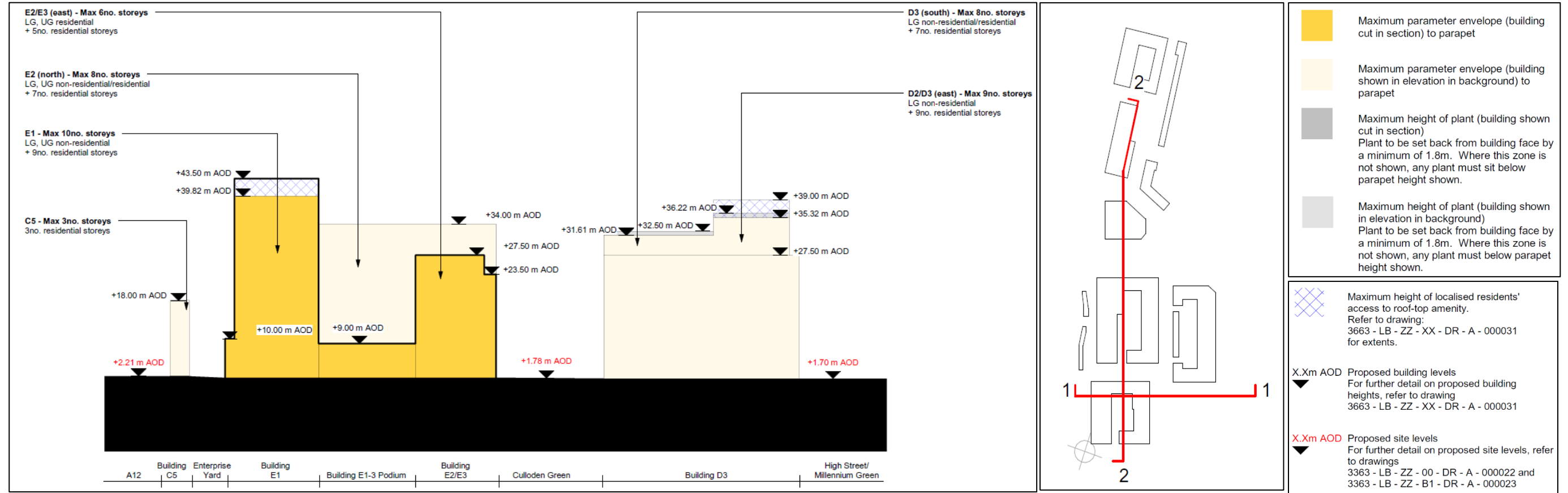


Figure 4.7 Parameter 02 – Section 02

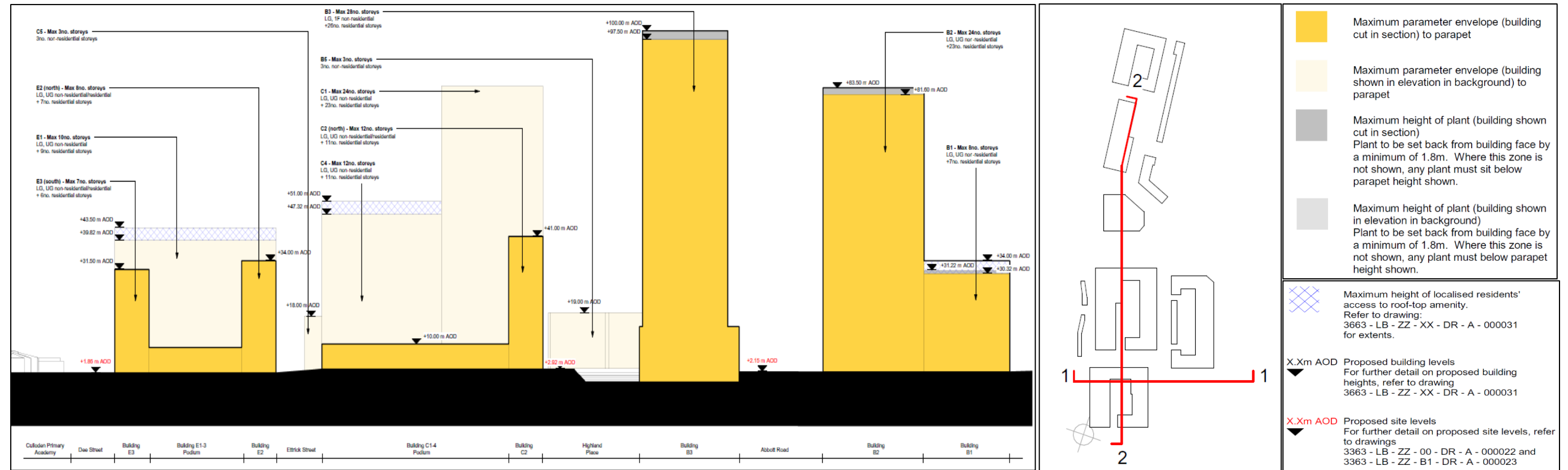


Table 4.7 Maximum Building Height (AOD) And Storeys (Detailed Proposals Provided Only)

Plot	Maximum AOD	Storeys
Detailed Plots		
Plot F	42.73	Ground plus 11 storeys
Plot H	Buildings H1/H2: 30.87 Building H3: 25.17	Buildings H1/H2: Ground plus 7 storeys Building H3: Ground plus 5 storeys
Plot I	39.38	Ground plus 10 storeys
Plot J	26.90	Ground plus 5 storeys
Outline Plots		
Plot A	49.5	-
Plot B	100	-
Plot C	84	-
Plot D	39	-
Plot E	43.5	-

Detailed Buildings – Phase A

Building Plot F

4.27 Building Plot F is located towards the southern corner of the Site, adjacent to Building Plot E1-3 and north of Building Plot H1-2 along Aberfeldy Street. Building Plot F will be part ground plus 11 storeys with a maximum AOD of 42.73m and part ground plus 6 storeys.

4.28 The ground floor of Building Plot F will be dedicated entirely to the provision of the main entrance lobby, retail, marketing suite, cycle storage and plant areas. Floors 1 – 11 are predominantly residential, with some plant space included on the first floor, containing studio, one, two and three-bedroom units with living space and private balconies / terraces. The rooftop includes a communal roof terrace and plant.

Building Plot H

4.29 Plot H will comprise 2 buildings (Buildings H1-3). Building Plot H1-2 will be jointly connected and lie on the western side of Aberfeldy Street whilst Building Plot H3 will lie on the eastern side. Buildings within Plot H are located adjacent to Blair Street and Lansbury Gardens.

4.30 Building Plot H1-2 range in height between 29.58 and 30.87m AOD. Building Plot H3 height ranges between 20.35 and 25.17m AOD.

4.31 The ground floor levels comprise of entrance lobbies, retail units with common facilities, plant and cycle storage. The general arrangement of floors one to seven comprise of one, two, three and four-bedroom residential units including living space and private balconies / terraces. Across buildings H1/3, levels above ground floor include a mix of one, two, three and four-bedroom units including living space and private balconies / terraces. A communal terrace on each side of the building will be located on the fifth floor.

Building Plot I

4.32 Building Plot I is located south of Blair Street and east of Blairgowrie Court. The building comprises ground floor plus 10 storeys with a maximum AOD of 39.38m.

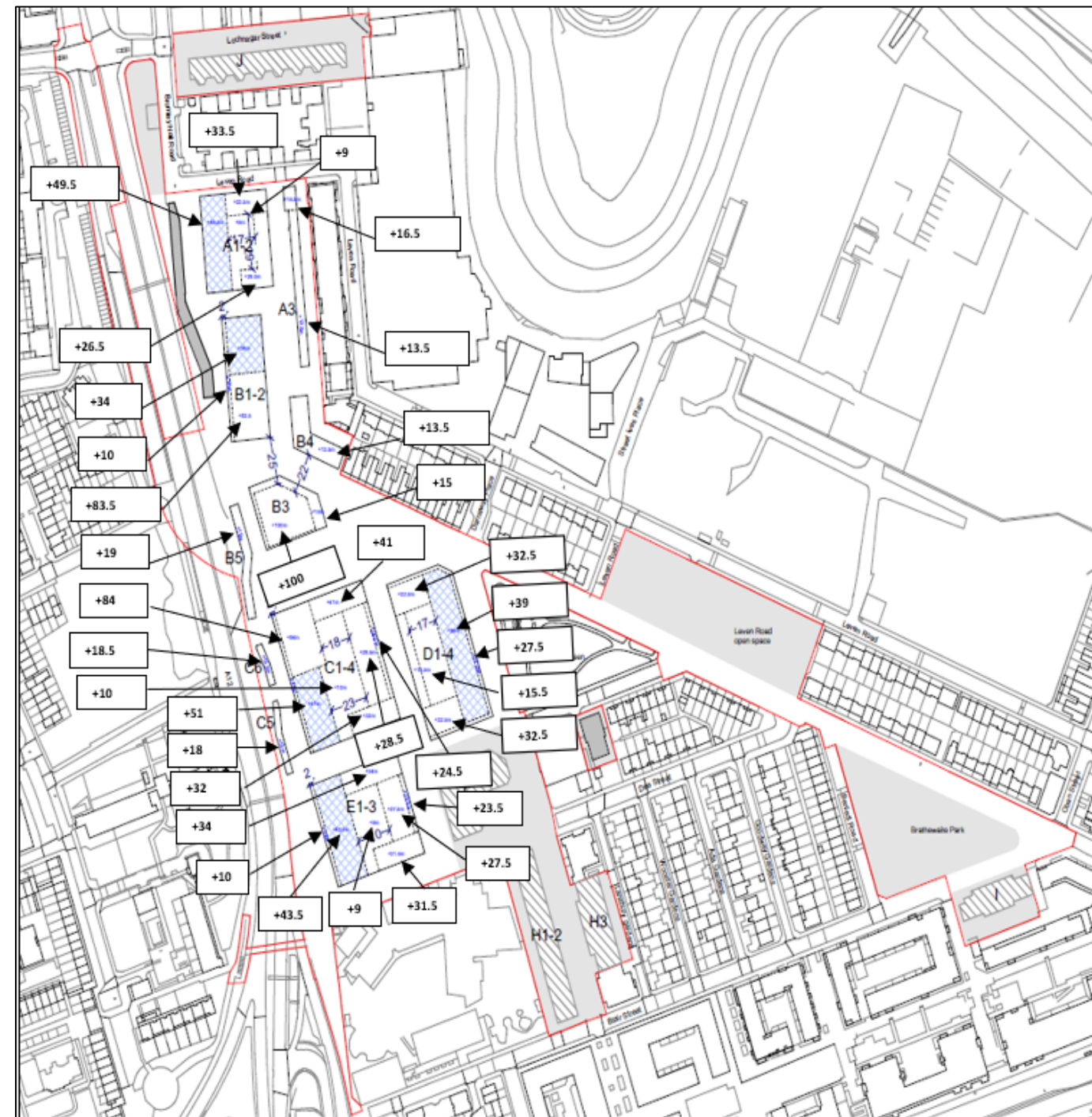
4.33 Ground floor uses across Building Plot I include residential amenity, plant, general storage, cycle storage and two two-bedroom residential units with private spaces to the front and rear. Floors 2-10 will include a mix of one- and two-bedroom residential units with living space. A communal terrace on the east side of the building will be located on the sixth floor whilst another communal terrace will be on the west side of the building on the seventh floor.

Building Plot J

4.34 Building Plot J is located adjacent to Bromley Hall Road and Lochnagar Street. Building Plot J varies between 1, 2 and 5 storeys with a maximum height (AOD) of 26.90m.

4.35 Ground Floor uses across Building Plot J include an entrance lobby and plant / cycle storage and residential uses comprising a mix of three, four and six-bedroom residential units with private gardens. The town houses will provide 4 and six-bedroom homes across one and two storeys whilst the maisonette block will provide 3-bedroom residential units across from ground level upwards. Plot J will also provide roof lights for the existing residential units, private roof terraces to the residential units and green roofs.

Figure 4.8 Maximum Building Heights (AOD) Across Outline Proposals



Outline Plots – Phases B-D

4.36 Each building contained within the outline parameter plans is limited in the amount it can deviate horizontally. The maximum building footprints are limited by the Building Plots Parameter Plan. Details within this plan display the maximum building footprint and development zone allowing for a 2m zone for potential building projections.

Plots A – E

4.37 Details within this Building Plots parameter plan display the maximum building footprint and development zone, allowing for a 2m zone for potential building projections.

4.38 The various uses for Building Plots A-E, described on the parameter plans comprise:

- Basement Level Use: the only basement across the Proposed Development, within Building B3, is dedicated to non-residential frontage (Class E) use.

- Lower Ground Level Uses: Across the residential plots, the lower ground floors may include non-residential frontage and residential frontage (Figure 4.9).
- Upper Ground Floor Level Uses: Across the buildings which include upper ground floor levels, these buildings will include areas of residential and non-residential frontage (Figure 4.10).
- First Floor Level Uses: Across the first-floor levels, there will be a mix of residential and non-residential frontage. Buildings B5, C5 and C6 will be entirely non-residential frontage whilst the remaining buildings will be residential frontage (Figure 4.11).
- Upper Floors Level Uses: Within the upper floor levels, buildings B5, C5 and C6 include non-residential frontage whilst the remaining buildings include entirely residential frontage (Parameter Plan – Land Use - Upper Floors Drawing No. 3663 - LB - ZZ - XX - DR - A – 000030).

Figure 4.9 Lower Ground Floor Level Land Uses

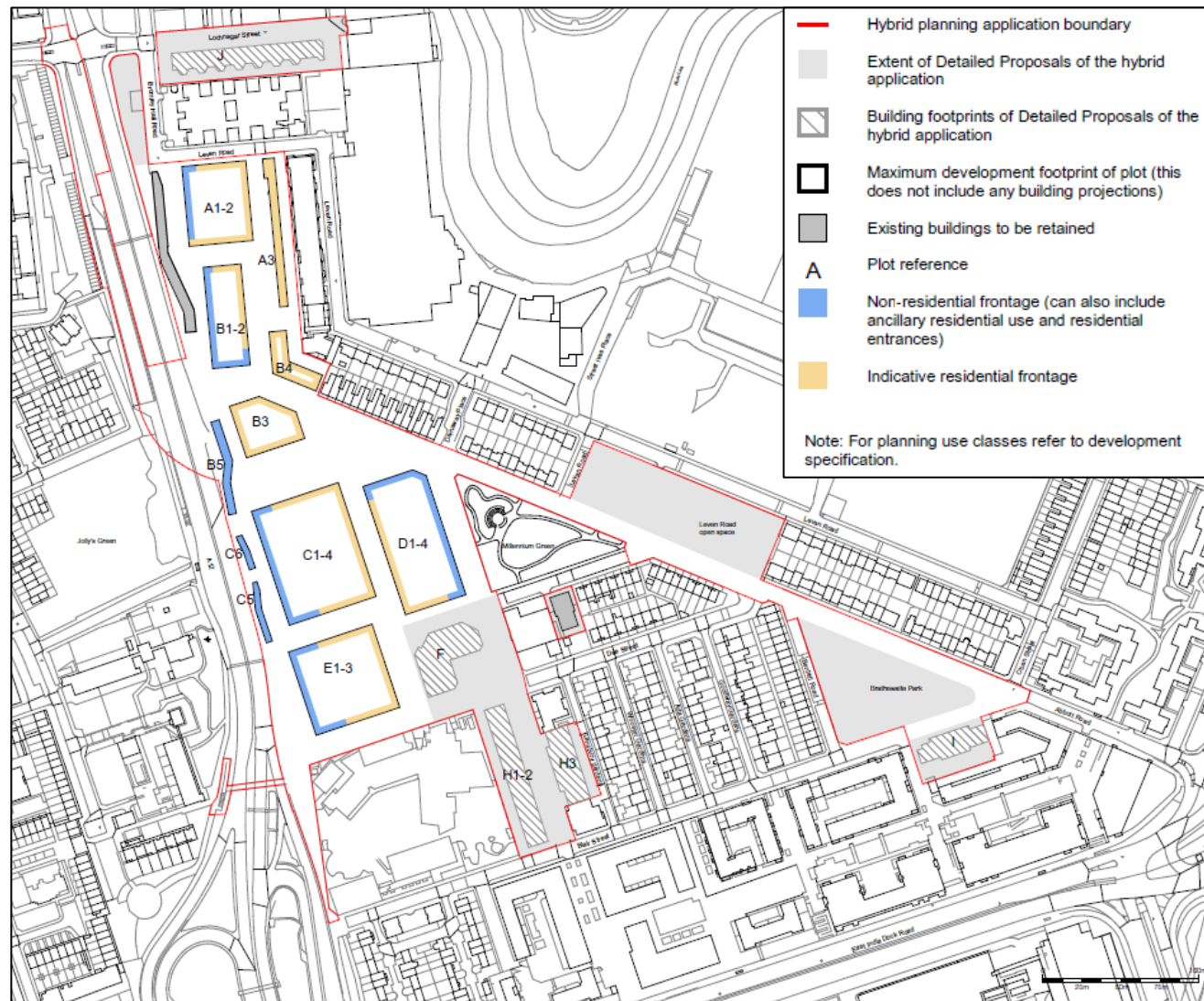
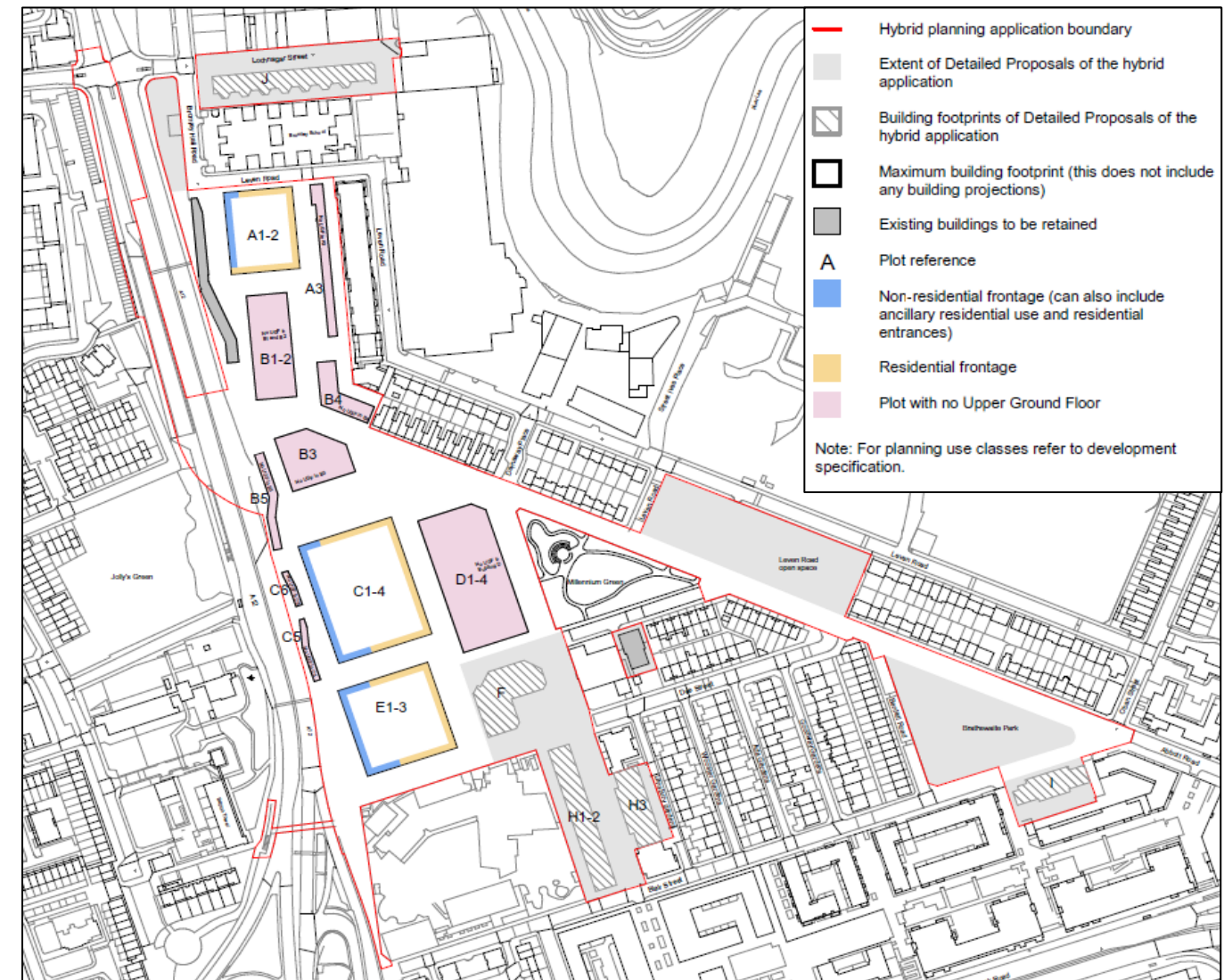


Figure 4.10 Upper Ground Floor Level Land Uses



Building Plots A

- 4.39 Plot A is located adjacently to the A12 on the west Site and Leven Road located to the north and east. Building Plot A1-2 ranges in height between 9 and 49.5m AOD. Building Plot A3 ranges in height between 13.5 and 16.5m AOD.
- 4.40 Ground floor uses across Building A-2 will contain non-residential and residential use. These uses will be split across a lower and upper ground floor. Ground floor uses across Building A3 will comprise residential use. Across buildings A1-3, upper floors will be residential.

Building Plots B

- 4.41 Across Building Plot B, there are 4 buildings (Buildings B1-5). Building B1-2 are jointly connected and located directly south of Buildings A1-2 and lies adjacently to Enterprise Yard. Building B3 is located south of Buildings B1-2. Building Plot B4 lies to the east of Building Plot 1-2 with Leven Road located on the east side of Building Plot B4. Building Plot B5 lies adjacent to the A12 and Building Plot B3.
- 4.42 Across Plot B, buildings range in height between 10 and 100m AOD. Buildings Plots B1-2 ranges between 10 and 83.5m in height. Building Plots B3 is the tallest building within this Plot and across the entire Proposed Development ranging between 15 and 100m AOD in height. Building Plot B4 will be a of maximum 13.5m AOD and Building Plot B5 will be a maximum of 19m AOD in height.
- 4.43 Ground floor uses within Building Plots B1-2 will comprise both non-residential and residential use. Building Plot B3 and Building Plot B4 ground floor uses will comprise residential use only and Building Plot B5 located adjacent the A12 is commercial with no residential use. Upper floor uses across Building Plots B1-2, B3 and B4 comprise residential use only.

Building Plots C

- 4.44 Building Plot C is located south-west of Jolly's Green. Building Plot C is made up of 3 buildings (Buildings C1-C6). Buildings Plots C1-4 are connected whilst Building Plots C5 and C6 stand as individual. Buildings Plots C1-4 are located south of Building Plot B3. The buildings are positioned in the centre of the Proposed Development. Building Plots C5 and C6 are located adjacent to the A12 with Building Plots C1-4 located east of Building Plots C6 and 6.
- 4.45 Building heights across Building Plots C1-4 range between 10 and 84m AOD. Building C5 will be a maximum of 18m AOD in height. Building Plot C6 will be a maximum of 18.5m AOD in height.
- 4.46 Ground floor uses across Buildings C1-4 comprise both residential and non-residential use split across upper and lower ground floor. Upper floor uses across Buildings C1-4 will comprise residential use. Ground floor uses and upper floor uses across Buildings C5 and C6 comprise non-residential use.

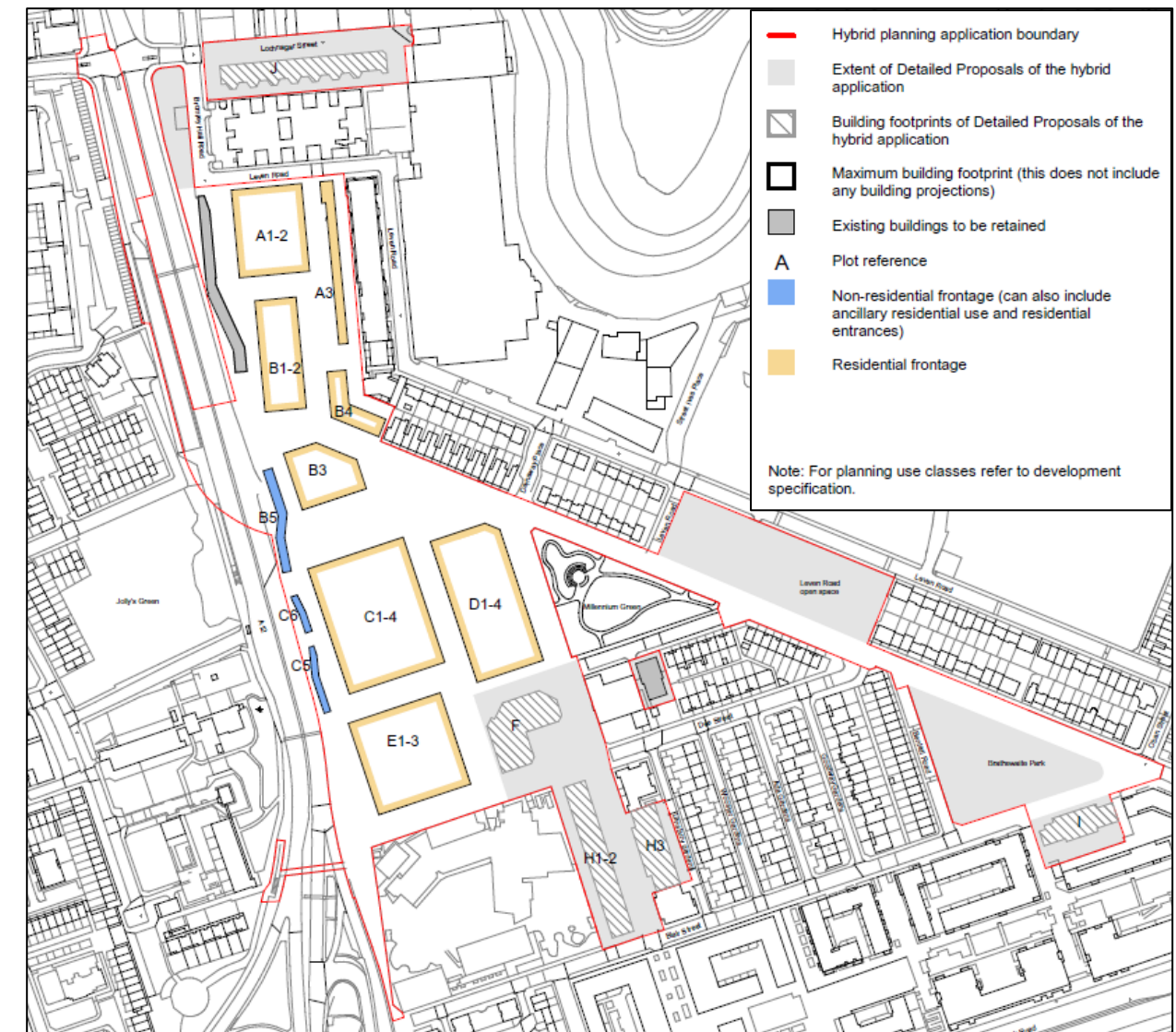
Building Plots D

- 4.47 Buildings within Plot D comprises Buildings D1-4. These are all jointly connected and lie to the western side of the Site Boundary. Plot D is located adjacently to the west of Millennium Green and on the eastern side of Building Plots C1-4.
- 4.48 Plot D ranges in height between 15.5 and 39m AOD in height.
- 4.49 Ground floor uses across Buildings Plots D1-4 will comprise residential and non-residential uses. The upper floor use will be residential.

Building Plot E

- 4.50 Buildings within Plot E included Buildings E1-3 which are all jointly connected. Plot E lies to the south of Buildings C1-4 and to the north of Culloden Primary Academy.
- 4.51 Plot E ranges in height between 9 and 43.5m AOD in height.
- 4.52 Ground floor and upper ground floor uses across Building Plots E1-3 will be residential and non-residential use. This will be split across and upper and lower ground floor. Upper floors will be residential.

Figure 4.11 First Floor Level Land Uses



APPEARANCE

Detailed Building Plots – Phase A

Building Plot F

4.53 The plinth includes curtain wall glazing which defines the shop fronts allowing the tenants to provide signage with the framework of the building. The key corners of the plinth will be designed to create a symmetrical sloping edge to promote and block East-West routes across the masterplan. The plinth will be designed to step out by 2.9m around the Town Square, to provide roof terraces for the units and Level 1. The precast elements will be textured and patterned to promote the cultural present across the Aberfeldy Village as it is today. The middle façade will be designed to benefit the users with the inclusion of large format windows and brick clad balconies. The crown of the façade will be designed with ‘folded’ precast elements. The windows will be visually elongated by metal panels below and above the windows. The panel above will provide discrete ventilation into the apartments. The windows will include a 800mm high sill to promote views out of the habitable rooms. The pier and opening will be defined by bonded brickwork piers that will define the openings. The band and balcony are distinguished from the infill by a darker mortar. Balconies will be tied into the design of creating a range of views for the residents. The façade material palette for Plot F will include rich red tones in combination with textured applications of precast concrete (**Figure 4.12**).

Building Plot H1- and H3

4.54 The base of Buildings H and H2 will comprise a large format curtain wall glazing which will define the shop fronts and provided opportunities for the tenants to present their signage. The key corners of the building will encourage circulation around the building. The precast elements will be designed to give a textured effect with a patterned design. The precast plinth transitions into red brick to signify the communally accessible homes of the building. The insets of the building will be comprised of a more horizontal design. The window openings will be designed with a metalwork panel above the window and vertically connected by a portion of bonded brick below each of the windows. An 800mm high sill will promote views out of the habitable rooms of the apartments. The pier and opening will be defined by bonded brickwork piers. The solid brickwork piers will be a light brick with a light coloured mortar. The balconies will be designed with a 300mm solid plate metal upstand to limit the views of the balconies from the street below. The base of Building H3 will be designed with a large format curtain wall glazing which will define the shop fronts and also provide the tenants with opportunities to add their own signage. The key corners of the Building will be inset in order to encourage circulation around the corners. The precast elements of the building will be a textured design and patterned to express the cultural diversity of the existing Site today. There will be 3 blocks designed in a light sand coloured brick to be broke up with vertically arranged windows. The insets of Building H3 will be designed to host access desks and outboard balconies. The façade material palette for Plot H is characterised by terracotta and sand / beige brickwork tones in combination with a variety of precast concrete (**Figure 4.13** and **Figure 4.14**).

Building Plot I

4.55 The base will include plum/pink coloured brickwork which will detain and define the inset residential entrance. The large format glazing of the building will provide active frontage from the immediate street scape. The body of the building has been designed to benefit the user experience with large format with large format windows and dual aspect balconies. The crown of the building will be expressed as a rippled precast to act as a solid balustrade to the roof terraces and the plant screen on the central roof. The window openings are bound by a metal panel above the window to ventilate the apartments. An 800mm sill will promote the views from the habitable rooms windows. The band and balcony will be designed with a soldier brickwork and precast datum to also define the balconies. The façade materiality includes primarily sandy, grey brickwork tones set against a rich plum base (**Figure 4.15**).

Building Plot J

4.56 The datum of Building J will include textured brickwork to run along the public facing elevations. This will not be present on the rear garden facing facades where a calmer elevation will be used to provide a backdrop for Bromley Hall School. To the north of the maisonette block, windows have been designed to benefit internal arrangements. The north-eastern corner has been designed to provide shelter to the communal terrace. The southern elevation has been designed to be characterised by a stepping roof terraces which is accessible from the kitchens of each unit. Roofs will be capped with a delicately detailed precast concrete. The townhouses will employ the same elevation as the maisonette block but at a smaller scale. The body and terraces of Plot J is designed to be primarily clad in rich red brickwork with a flush faced colour matched mortar. The window openings are to be visually elongated by a metalwork panel above the window and a portion of textured brickwork below each of the windows. The panel above the windows will provide ventilation of the apartments. An 800mm sill will promote views out of the apartment’s habitable rooms. The façade materiality of Plot J includes rich red tones in combination with textured applications of precast concrete (**Figure 4.16**).

Figure 4.12 Façade Design Building Plot F (North Elevation)

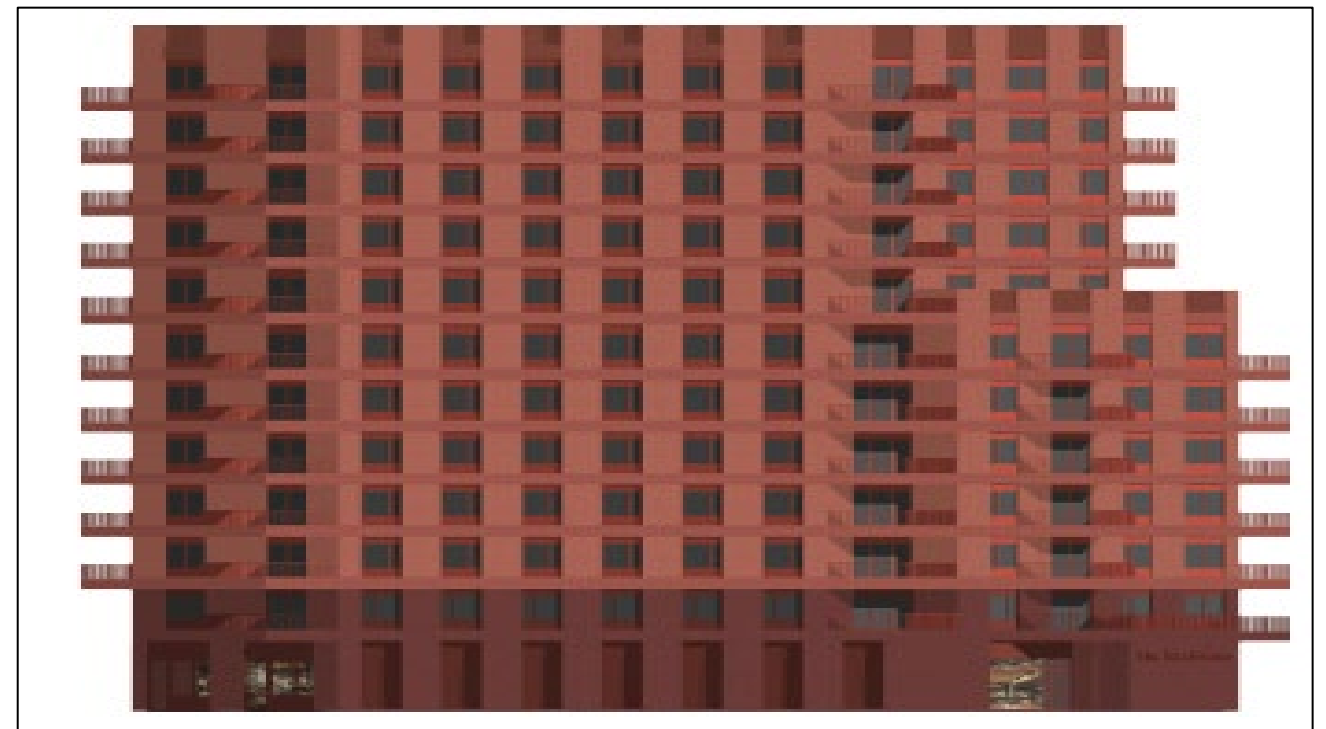


Figure 4.13 Façade Design Building Plot H/2 (East Elevation)



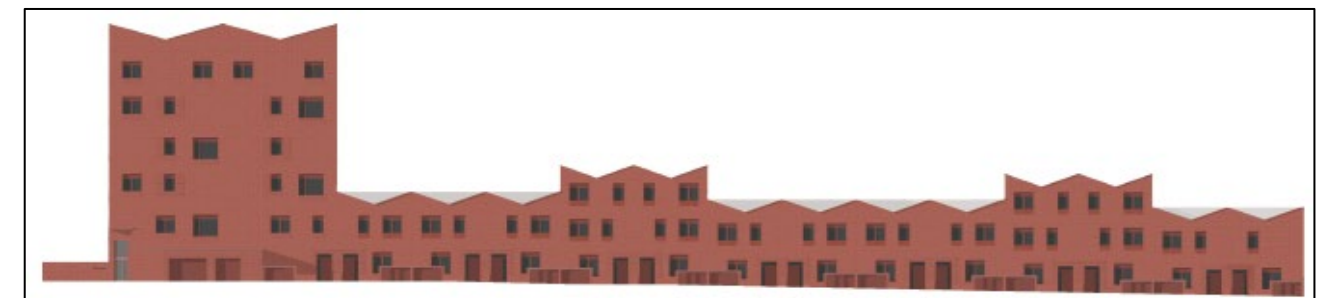
Figure 4.14 Façade Design Building Plot H3 (East Elevation)



Figure 4.15 Façade Design Building Plot I (North Elevation)



Figure 4.16 Façade Design Building Plot J (North Elevation)



Outline Building Plots – Phases B-D

- 4.57 The Design Code stipulates a number of design controls that will ensure that the Buildings (Buildings A, B, C, D and E) will all be similar in their architectural appearance. All buildings with the exception of Building B3 will share the same general façade appearance, with high quality brick façades, glazing with metal window frames and concrete plinths to the lower non-residential floors. The façade of Building B3 will be a durable, robust and high-quality cast material, glazing with metal window frames and a two-storey concrete plinth.
- 4.58 Blank façades will be avoided in areas overlooking the public realm areas so that the public realm benefits from surveillance by the surrounding residential uses. Balconies will be recessed on the homes facing the A12 and in the taller buildings (B2, B3 and C1) of the Proposed Development. Projecting balconies will be provided to all other homes within the Proposed Development.

LANDSCAPING

- 4.59** The landscape design for the Proposed Development will create connections to the existing surrounding public green spaces which include;
- Millennium Green,
 - Braithwaite Park;
 - East India Green;
 - Leven Road Open Space; and,
 - Poplar Riverside Park.
- 4.60** As part of the Proposed Development, certain existing open spaces will be re-landscaped creating a more open space with a range of uses and will lie within Phase A, the detailed proposals of the planning application. These open spaces include Leven Road Open Space and Braithwaite Park. Millennium Green is not included within the Site boundary however, the delivery of the Millennium Green improvements will be subject to a separate S106 agreement.
- 4.61** **Figure 4.18** details the Principal Public Realm Areas across the Outline Proposals of the Proposed Development.
- 4.62** The landscape design comprises various Character Areas. These Character Areas have been defined across the Proposed Development and are shown within **Figure 4.17**, and detailed below:

Character Areas

Healthy Street

- 4.63** The new Healthy Street will run along the existing Abbott Road and will be a green spine connecting the series of public open spaces. The existing Leven Road Open Space and Braithwaite Park will be improved as part of the detailed proposals of the Proposed Development. Leven Road Open Space will become a hub for sporting, fitness and play. There will be new seating, paving and outdoor gyms. New tree planting to enhance the existing trees will be provided. Braithwaite Park re-provisions include a mix of activity. The Proposed Development includes provision of children's play space and paving.
- 4.64** A new civic space on Highland Place is proposed. The Proposed Development will deliver an enhanced pedestrian and cycle connection from Aberfeldy to the west of the A12 via the pedestrianisation of the existing vehicle underpass. The Aberfeldy New Village LLP ('the Applicant') is aware that there are aspirations for enhancement works to be undertaken at Jolly's Green which include a desire for a direct route to it via the proposed new underpass. The Proposed Development does not include these works to Jolly's Green and the rationale for that is set out in the Planning Statement. The Applicant is aware that there are aspirations for enhancement works to be undertaken at Jolly's green however, the Proposed Development does not include these works at Jolly's Green. The Proposed Development will include key proposed public open space throughout the Proposed Development.

Aberfeldy Street

- 4.65** The current Aberfeldy Street will be re-provided with a mix of retail and community facilities. The proposed layout will retain the existing street alignment and mature trees, with new buildings with non-residential uses located at the ground floor with residential above. Balconies will be positioned to overlook Aberfeldy Street. The Square, a new proposed public open space positioned adjacently to Building F and St. Nicholas Church, will be used for community events or local markets.
- 4.66** Kirkmichael Road will become closed to traffic (as its existing state) to create a Play Street. Lansbury Gardens will be transformed into a functional residential street which will provide pedestrian, cycle and vehicle access and parking to the existing homes. New tree planting will provide greenery to the street and break up the arrangement of parking.

- 4.67** The Aberfeldy Street will act as a key route for connecting the various Building Plots and previous phases of the Aberfeldy Masterplan. The Aberfeldy Street will also promote walking, cycling and the use of public transport. It will prioritise access to pedestrian and cyclists through the implementation of traffic calming measures. The street will be designed to be leafy and green in character with soft landscaping implemented to encourage outdoor interactions.

Community Lane

- 4.68** Community Lane is a residential north-south route. The street provides connections to Leven Road to Culloden Primary School. Community Lane is intended to be family and particularly child friendly. Community Lane will be car-free to encourage pedestrian and cyclist movement. Front doors will be located directly onto the street with the buildings lower in massing to facilitate a residential feel. Soft landscaping will be provided in order to encourage doorstep play and provide doorstep scale access to nature and green space. This will green and open the space the north of Community Lane and Nairn Street which is currently considered an area with deficient in access to nature in the LBTH green grid strategy³.
- 4.69** The Community Lane character area will include Nairn Square in the north and Culloden Green in the south which will provide areas for social opportunities. A mix of dedicated and playable opportunities and multiple play areas will be designed to cater for several ages, groups and abilities.

Enterprise Yard

- 4.70** Enterprise Yard will run parallel to the A12 and connecting Poplar Works to the north and Blair Street to the south. Residential courtyard buildings are proposed in buildings to the east of Enterprise Yard with non-residential uses at ground floor level to ensure active frontage.
- 4.71** The East West Links will improve permeability and connectivity within the masterplan and its surroundings, allowing pedestrians and cyclists to move freely through the neighbourhood between the north-south routes of the Aberfeldy Street, Community Lane and Enterprise Yard.
- 4.72** Other public realm in the form of courtyard buildings and roof terraces will contribute to the over public realm strategy across the Proposed Development. Courtyard Buildings will be developed within the Outline Proposals of the planning application whilst the Roof terraces are contained within the Detailed Proposals.

Figure 4.17 Illustrative Landscape Character Areas

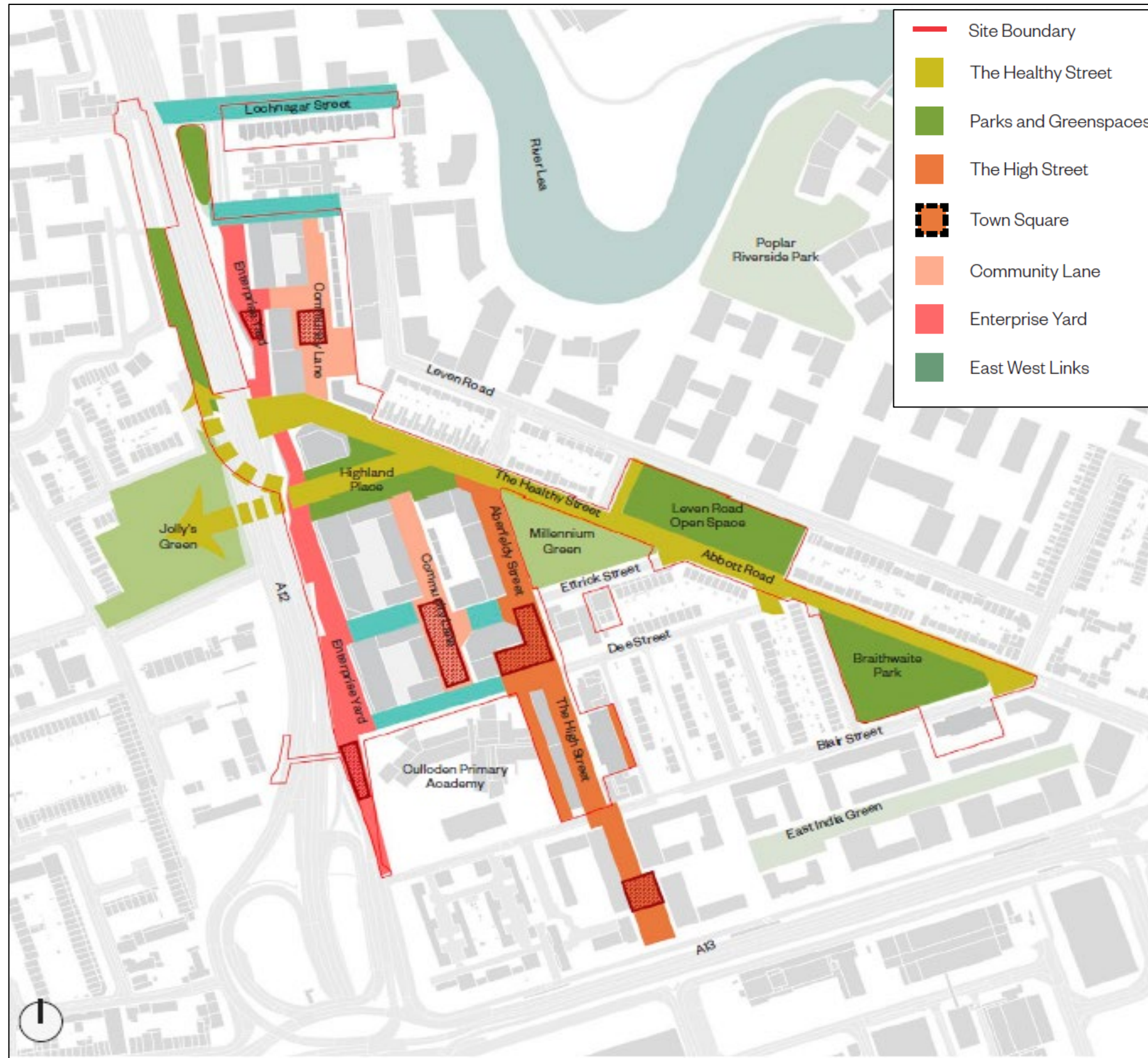
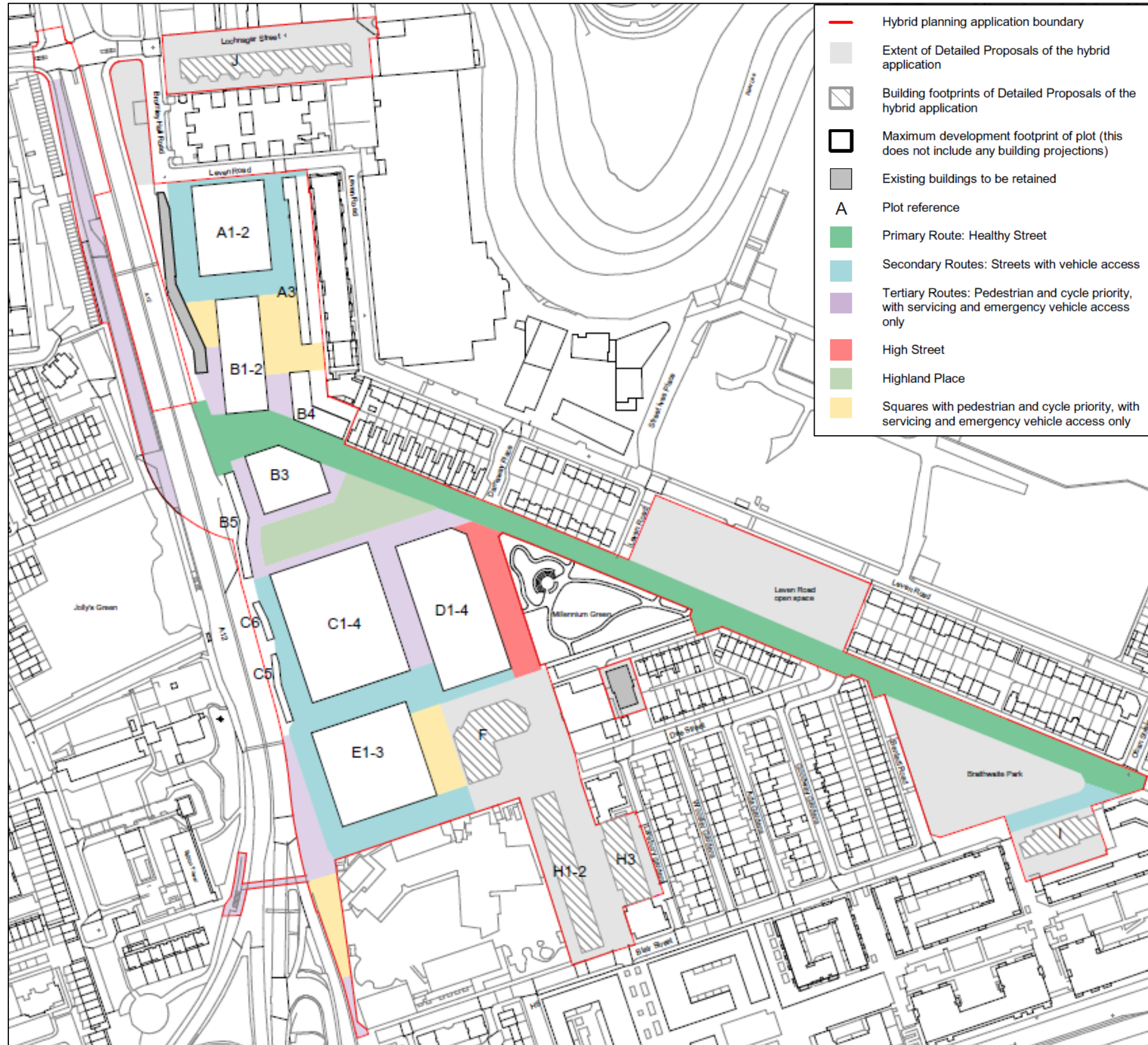


Figure 4.18 Principal Public Realm Areas

4.73



Podiums Buildings

4.74 Three podium level communal spaces have been included within the Outline Proposals of the planning application and are included across Plots A, C and E. The communal spaces have been designed to be inclusive and accessible. Plots A, C and E provide 80% play space to 20% communal space

Allotments

4.75 A small section of land located adjacently to Plot J currently comprises a makeshift allotment area. The new proposed public realm in this area will be centred on community togetherness and well-being with the community garden at its centre. The existing allotments will be built upon and expanded into a new interactive area and functioning community garden.

Roof Gardens / Terraces

4.76 Roof garden design will be spread across the Outline Proposals of the planning application. Across the roof gardens, their design will provide a variety of activity and promote socialisation within these areas.

4.77 Roof Terraces are located within Plots F, H3 and I, included within the Detailed Proposals of the planning application. The roof terraces across these Buildings will provide communal space for relaxation, exercise, work, small gatherings, and events. There will be a variety of hard and soft surfaces, with hard surfaces for circulation, formal activity with a texture and interest. The soft surfaces will include grass, provide informal relaxation as well as operating as a flexible multifunctional space. The planting across the roof terraces will include a variety of texture, seasonality and flowers. The roof terraces will encourage biodiversity with the provision of wildlife installations, bird baths and bird feeding stations.

4.78 Across the roof terrace in Building F, the plant included on the roof terrace (smoke extractor) will determine the organisation of the space. Planting and a patterned open metal mesh, 1.8m high will be topped with a slim metal pergola. The screen and the pergola will be covered in climbers. Formal seating and tables will be provided across Building F roof terrace. Individual semi-mature multi-stemmed large shrubs / small trees will be provided in the corners to control the views out of the space. Paving will be provided in a Dutch clay paver to emphasise the residential character of the space.

4.79 Across Building H3, there will be two small roof terraces arranged with a simple rectilinear raised planting bed. Paving would be created in a Dutch Clay paver to enhance the residential feel. Across Plot I, there will be two roof terraces located on the eastern and western shoulders of the building. Both terraces are designed with structures, seating and plating being centrally located. There will be a tessellated hexagonal pattern of raised planted and informal seating structures as the main characterising element which will bring greenery into these spaces. The planting will have a variety of texture, seasonality, and flowers. The roof gardens will encourage biodiversity through the use of wildlife installation, bird baths and bird feeding stations.

Planting Strategy

4.80 New trees are proposed which compliment the existing canopy and character of mature trees. The tree planting strategy will strengthen the wider green connections strategy, provide shade in the summer and shelter in cooler and winter months. Up to 424 new trees will be planted across the Proposed Development, provided on ground plane level within the public realm areas and across three Level 1 podiums. There are 18 trees proposed on the roof terraces which will form part of Phase A and further tree planting will be spread across Phases B-D roof terraces, in accordance with the Design Code.

4.81 **Figure 4.19** indicates the existing and proposed new tree strategy across the Proposed Development. **Figure 4.20** indicates the proposed species and tree removal. Other planting has been designed across the Proposed Development to offer different habitat value, colour, texture, size and suitably located based on their individual growing requirements.

4.82 The podiums and roof terraces will include climbing plants to add a vertical element to the roof gars, flower-rich ornamental perennials, grass and shrub planting which has been designed to suit the podium and upper-level microclimate wind conditions.

Tree Removal

4.83 The existing tree structure has been considered and plays a key role with the design of the masterplan landscape layout. To compliment the existing canopy and character of the mature trees, the illustrative

masterplan proposes substantial planting of new trees. To facilitate the Proposed Development, out of the 193 trees surveyed, 66 will be removed (**Figure 4.20**) including sycamore, silver birch, buddleia, Norway Maple (a uniform group lining the roadside), paperbark maple, crab apple; a group of Portuguese Laurel, small leaved lime and Swedish whitebeam; Common Whitebeam, Rowan, bay, weeping willow, hazel and elder.

Figure 4.19 Existing Tree Retention and Proposed



Figure 4.20 Proposed Species and Tree Removal



Public Open Space

4.84 In addition to the built floorspace set out above, the Proposed Development includes areas of 3,473m² open space including:

- A new public Park, called 'Highland Place';
- A new Town Square;
- A local square, 'Culloden Green';
- An allotment area, the 'Allotments'; and
- Improvements to Leven Road Open Space and Braithwaite Park.

Communal Amenity

4.85 Communal amenity will be provided in the form of ground floor courtyards, level 1 Podiums, and Roof Gardens. In respect of the Detailed Proposals, the following amount of communal amenity is provided:

- Plot F – 337m²;
- Plot H – 130m²; and
- Plot I – 176m²; and

Child Play Space

4.86 The Proposed Development will provide dedicated play space provision which will be calculated in line with the London Borough of Tower Hamlet's play space calculator. Phase A play space is presented in **Table 4.8**

Table 4.8 Phase A Playscape Requirements

Age Group	Requirement	Quantum Proposed
Aged 0-4	643m ²	643m ²
Aged 5-11	564m ²	564m ²
Aged 12-18	634m ²	62m ²
Total	1,842m²	1,014m²

4.87 Due to the indicative phasing, the 0–4-year-old play provision for Plot F will be in a temporary location next to Plot F in the future Phase D. Its permanent location will be delivered as part of Phase C.

4.88 Play space provision for the under 5s and 5-11 year olds will be provided on-site and the final provision is subject to alteration for each Phase of the Outline Proposals, determined by the final mix of the residential units (by size and tenure) applied for at each RMA stage. The play and open space plans for the illustrative scheme provided in the Design and Access Statement demonstrates how the required play space for the child yield generated by the accommodation schedule as assessed in this chapter, can be met, demonstrating how it will be possible to meet the requirements of the LBTH within the Site.

Lighting Strategy

- 4.89 The lighting strategy proposes the re-use and reconfiguration of existing light columns present across the existing Site. The lighting strategy will ensure the streets are lit to meet LBTH highway standards. The new lighting strategy will include new medium height street light columns to tie in with the existing columns, along the new highway layouts of the A12 bus/gate junction, Ettrick Street and Dee Street. This strategy will also be applied to Lochnagar Street to provide lighting for Plot J and the immediate area outside Plot I along Blair Street (Figure 4.21).
- 4.90 The underpass lighting will create a distinctive character and fun atmosphere with the lighting used to represent this. The lighting strategy will include vibrant and colourful wall up and down lighting to create a sense of safeness and security.
- 4.91 External lighting will be designed to be compatible with surrounding residential receptors as required by BS EN 12464-2. Areas of the wider masterplan around the pedestrian priority areas will include low height street columns as standard. Areas of feature lighting such as tree up lighting, integrated furniture lighting and landscape features at night are also proposed.

Figure 4.21 Development Lighting Strategy



ACCESS, PARKING AND SERVICING

Vehicle Access

- 4.92 The existing Site is accessible by pedestrians/cyclists from multiple locations along A12 and A13, with the roads being accompanied by suitable crossing facilities (pedestrian/cyclist subways and signalised crossings). The existing pedestrian/cyclist subways are however unpleasant, enclosed, provide poor lighting and lack surveillance (passive and controlled). An Active Travel Zone (ATZ) assessment was undertaken analysing the crossing facilities in proximity of the Site and along key journeys.
- 4.93 Vehicles access the Site from A12 (north) and A13 (south). Access from A12 is via a slip road which provides entry directly onto the northern side of Abbott Road. Access from A13 leads to the southern side of Abbott Road. Both access points provide entry to all areas of Aberfeldy Village.
- 4.94 The proposed pedestrianised underpass will provide an easier and attractive method to cross the infrastructural barrier of the A12, separating pedestrians and cyclists from any potential interaction with vehicular traffic, which is higher along the A12. The other access points for pedestrians, cyclists and vehicles will remain unchanged in location; however, footways and the road network will be improved with general maintenance.
- 4.95 Additionally, the Dee Street subway will be improved significantly as part of the Proposed Development, which will not only benefit future residents of the Site, but existing residents and schoolchildren of the Culloden Primary Academy as well.
- 4.96 The principles of vehicle access to the Site will remain the same as part of the Proposed Development. A new junction will be provided to the A12 to replace the existing underpass with on and off slip. Figure 4.22 shows a plan setting out the general access and movement strategy for vehicles at the Proposed Development.

Pedestrian And Cycle Access

- 4.97 Pedestrian and cycle access is shared across the Site with the Proposed Development providing a primary cycle route linking the east and west. The strategy has also been designed to allow prioritisation of pedestrian and cycle movements throughout the Proposed Development, with the implementation of traffic calming measures where vehicular access is required and helping create a safe environment for all road users.
- 4.98 Pedestrian routes are dispersed across the Proposed Development to allow movement across the Site without depending on vehicular means.
- 4.99 The reprovisions of the current A12 vehicular underpass, will allow connections to the surrounding area possible. The strategy for the underpass has been designed to accommodate the potential future cycle demand across the area (see Figure 4.23 for an illustrative design).
- 4.100 Community Lane is the main north south internal pedestrian and cycle route with emergency access only.
- 4.101 Abbott Road will provide direct access through the re-purposed underpass to link the Aberfeldy Estate to Crisp Street Market to the west. Abbott Road will also provide access to Canning Town to the east.
- 4.102 The network of secondary streets has been designed to promote slower traffic movement throughout the Proposed Development with greater pedestrian and cyclist activity.
- 4.103 The existing Dee Street pedestrian underpass will also be upgraded to strengthen the east to west connections.

Figure 4.22 General Access and Movement Strategy

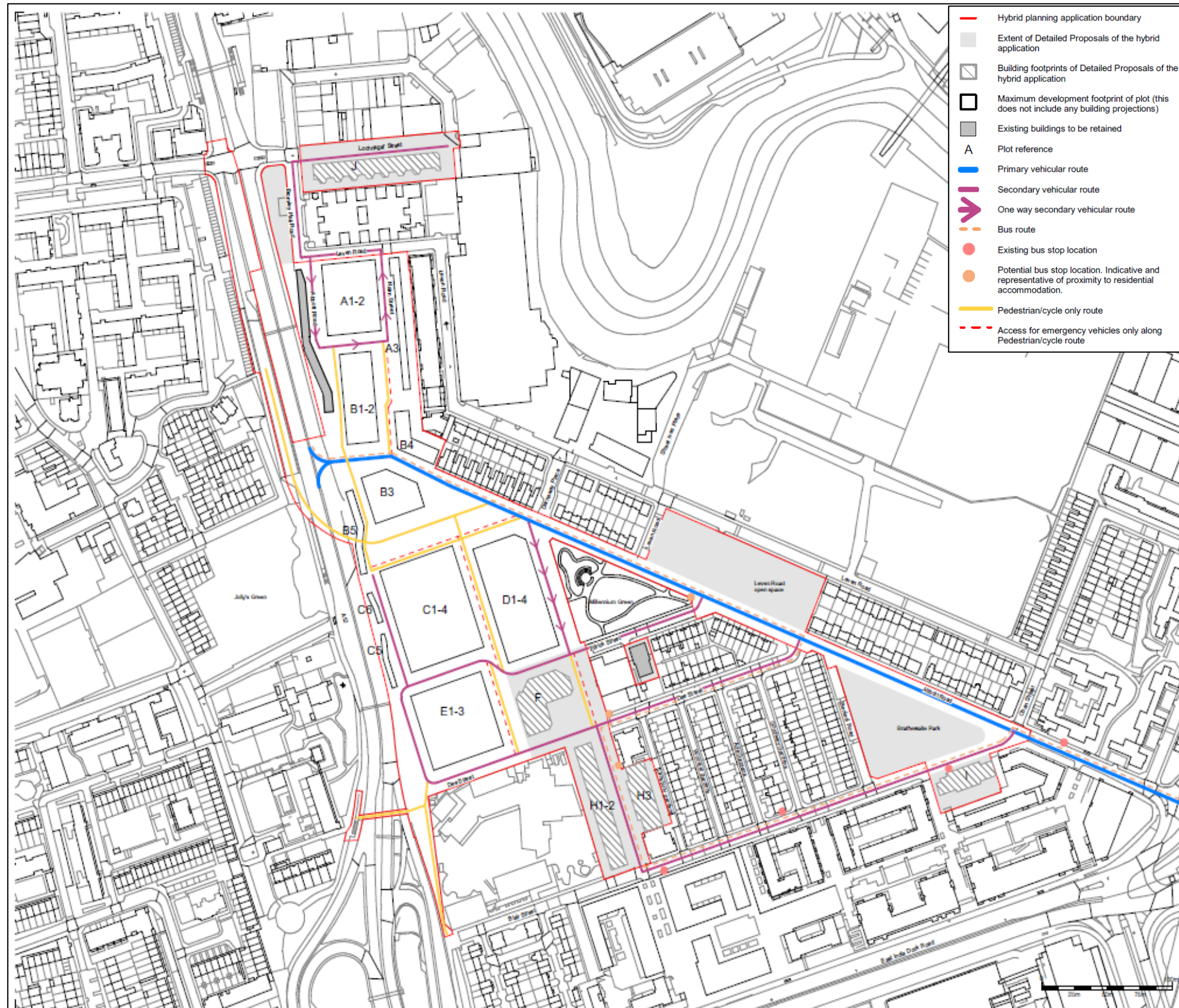


Figure 4.23 Illustrative Visualisation of The Proposed Basement Design and Underpass



Car Parking

- 4.104** Most parking on the existing Site is located on-street. The Site is located within Controlled Parking Zone (CPZ) Zone B3, which restricts parking to permit holders Monday to Friday between 8:30am and 5:30pm.
- 4.105** The Proposed Development will be car-lite except for Blue Badge parking spaces for all land uses. However, returning residents are permitted to apply for a parking permit due to their existing car parking spaces being removed. A total of 71 returning residents have applied for the permit and in order to protect local parking amenity, new residents would be prohibited from obtaining on-street parking permits. There are 149 private car parking spaces and 92 public CPZ spaces that would be directly affected by the Proposed Development.
- 4.106** The residential development will deliver 3% Blue Badge parking, which equates to 50-spaces. Parking will be provided on-street and within the development (i.e., podium parking). One Blue Badge space is included for commercial uses. Accessible car parking spaces will be provided close to building entrances to reduce time and distance travelling between vehicle and building. **Table 4.9** provides the breakdown of car parking across the Proposed Development.
- 4.107** A car club operator will be approached to establish the business case for providing a car club service to meet the needs of residents who do not own cars. Car club operators will be approached for expressions of interest. Car club provision will be as follows:
- One space with the Phase A development;
 - One space with the Phase B development;
 - One space with the Phase C development; and
 - One space with the Phase D development.
- 4.108** This equates to four car club parking spaces within the Proposed Development and is adequate to accommodate the potential demand from future residents and employees.

Table 4.9 Car Parking Spaces across the Proposed Development

Phase	Maximum Car Parking Type		
	Permit Parking Spaces	Accessible Parking Spaces	Car Club Spaces
A	5	9	1
B*	31	17	1
C*	35	18	1
D*	0	6	1
TOTAL	71	50	4

Notes: * - Indicative breakdown of car parking across the Proposed Development for the Outline Proposals

Cycle Parking

- 4.109** **Table 4.10** provides a breakdown of the proposed cycle parking spaces for the Detailed Proposals only (Phase A). Across the Outline Proposals, the cycle parking provision across Phases B-D will meet the London Plan Policy, as they come forward at RMA stages.
- 4.110** Cycle parking provision (both long and short stay) for each proposed land use will be compliant with the London Plan (2021) and will be designed in accordance with TfL's London Cycle Design Standards (LCDS). The London Plan uses the formally used land-use codes and has not transferred over to the new land uses; therefore, cycle parking standards are based around the land uses outlined with the London Plan 2021.

Table 4.10 Cycle Parking Provision - Phase A

Phase	Cycle Parking Type		
	Long Stay	Short Stay	Total
A	503	126	629

Servicing

- 4.111** Deliveries and servicing of the existing units is currently undertaken from the public highway such as in the form of parking bays and sections of single or double yellow lines without loading restrictions.
- 4.112** The section of Aberfeldy Street that functions as a local high street is serviced both from Aberfeldy Street itself and from the streets to the rear of the commercial units; Kirkmichael Road and Lansbury Gardens. There is little to no space for servicing of these units off the public highway, which can cause issues on the narrow streets when parking pressure is high.
- 4.113** Six dedicated on-street loading bays are proposed which will accommodate 8m rigid lorries will be provided. The proposed location for loading bays for the residential and commercial properties ensures access to all buildings can be achieved from each bay.
- 4.114** The following loading bays are proposed:
- 2 Aberfeldy Street, western side of the road;
 - 1 Dee Street, eastern side of the road, west of building E1;
 - 1 Ettrick Street, northern side of the road, south of building C3;
 - 1 Abbott Road, southern side of the road, north of building B3; and
 - 1 Nairn Street, southern side of the road, north of building B1.
- 4.115** In addition to these dedicated loading bays, sections of single and double yellow line markings are proposed to allow for flexible loading and drop-off when required. Furthermore, several of the proposed residential blocks will allow loading off-street, including Block A, Block C and Block E.
- 4.116** A draft Delivery and Servicing Plan (DSP) has been produced as a standalone document in order to manage refuse, delivery and service vehicle arrangements and overall accessibility. While it is recognised this will be a live document that will need to be adapted over the life of the development, the DSP sets out a range of

management strategies and measures to ensure the Site can be readily serviced in an efficient and safe manner without inconveniencing others.

4.117 By providing more formalised servicing space within the Site and introducing more management of deliveries the impact of deliveries and servicing on new and existing residents, visitors, and employees of the Site will be reduced, improving quality of life and making the Site more sustainable.

Refuse Strategy

4.118 In line with LBTH Policy, four strategies have been included within the design of the Proposed Development. These include:

- Traditional communal Eurobin collections – Buildings F, H1, H2 and H3;
- SULO underground collection;
- Traditional individual wheelie bin collections – Building J; and,
- Portable waste compactors in podiums – Buildings A, B, C, D & E.

4.119 Bin stores are located on the ground floors of each core and have been designed to minimise their frontage and impact onto the public realm.

4.120 Three proposed collection points for the buildings are served by the compactors – which are located within each of the courtyard building’s podium car park.

4.121 Buildings within Phase A of the Proposed Development are to be served by four collection points. Three of these collection points are traditional Eurobin collection and the fourth to be located in Building J.

4.122 Residential houses within Phase A and B of the Proposed Development will be provided with individual wheelie bin collection points.

4.123 **Figure 4. 24** indicates the proposed refuse strategy across the Proposed Development (inclusive of both outline and detail applications).

Refuse Management

4.124 Refuse management will be required across the Proposed Development. This will be provided by an on-site facilities management team.

4.125 The compactor refuse strategy will require a managed solution. The contractor will be required to move the refuse for the residential stores into the compactor using a tow tractor. The refuse stores have been designed to allow for these to be emptied every two days.

4.126 Compactors are located within the three podium car parks; two within Phase C and one within Phase B. Refuse generated from Phase B will be transferred from Building B1 and B2 into Building A. In Phase C, refuse will be transferred from Building B3, Building C and Building D, and will be collected in Building C. Building E will serve itself with the refused from the three refuse stores moved to the podium car park.

4.127 **Figure 4.25** indicates refuse management across the Proposed Development.

ENVIRONMENTAL DESIGN ASPECTS

Flooding Risk and Drainage

4.128 The Flood Risk Assessment states that finished floor levels of the Proposed Development should be set to a minimum 0.15m above adjacent ground levels and above peak flood levels in the 2100 climate change breach scenario. Where this is not possible, sleeping accommodation (bedrooms) should be- provided at first floor and above.

4.129 For the retail element of the application, finished floor levels of the proposed unit should be set to a minimum of 0.15m above adjacent ground levels.

4.130 Flood resistant and resilient construction techniques should be incorporated into the design of the buildings where appropriate.

Figure 4.24 Refuse Strategy

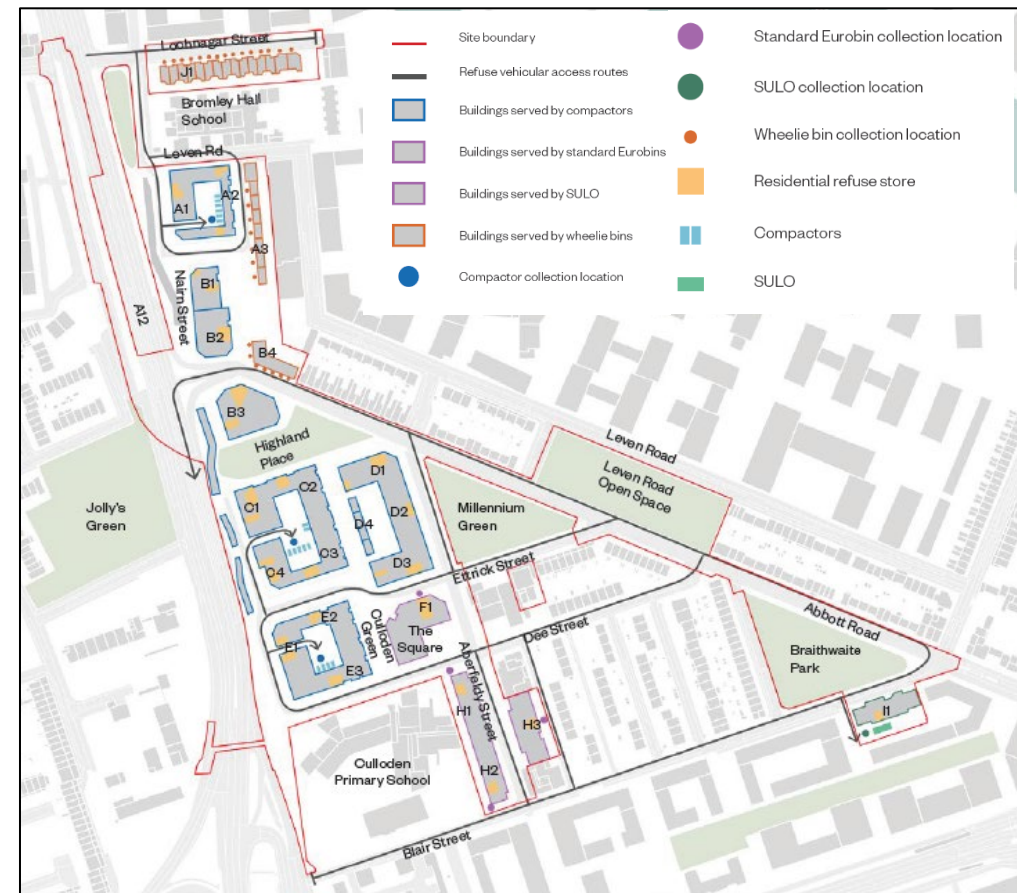
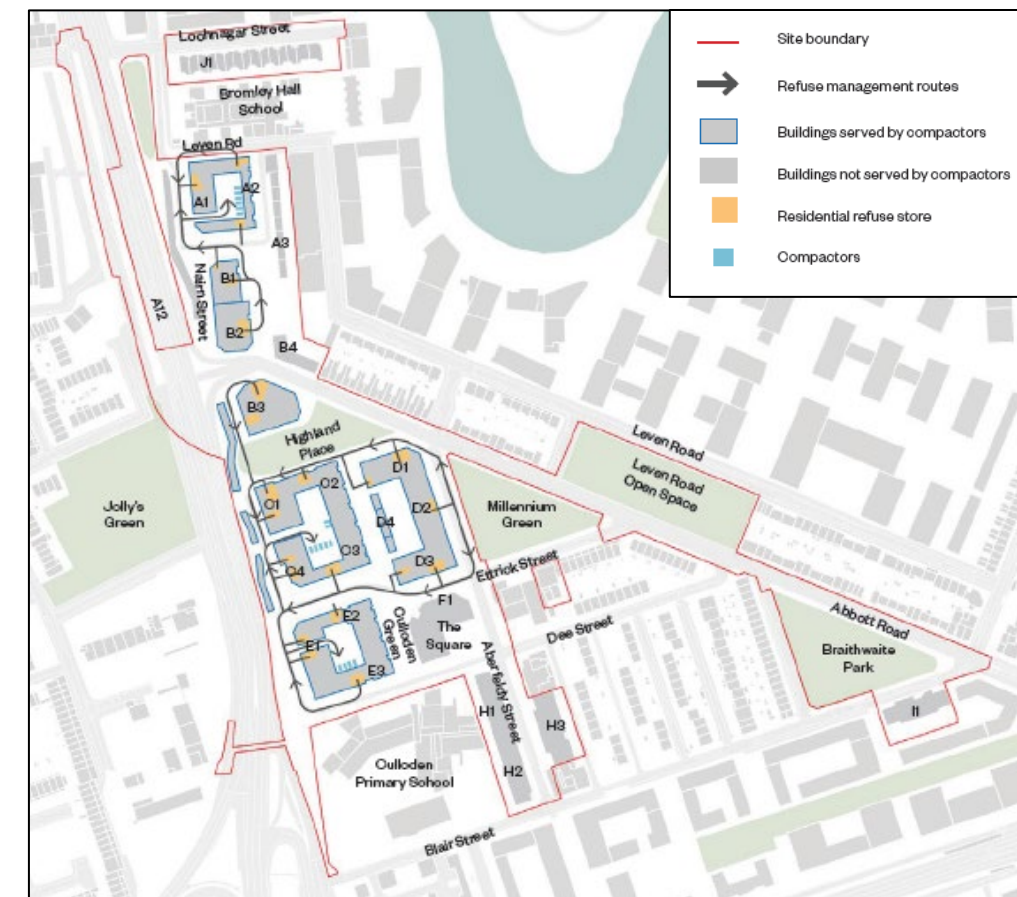


Figure 4.25 Refuse Management



Foul Drainage

4.131 Due to the size and phasing of the Proposed Development, foul drainage from the Site will be spilt into 10 individual outfalls into the Thames Water combined network. The proposed strategy includes various connections to the existing Thames Water combined network. These are outlined below:

- Five connections to the Thames Water combined water sewer network are proposed for Phase A; and,
- Three new connections for Phase B.

Proposed Surface Water Drainage Strategy

4.132 LBTH will be contacted to discuss the proposed surface water discharge rates for the Proposed Development

4.133 A predevelopment enquiry has been submitted to Thames Water to confirm there is sufficient capacity within the Thames Water public sewer network to accommodate the Proposed Development.

4.134 Hydraulic calculations indicate that the attenuation volume required for the Proposed Development to discharge at the proposed discharge rate of 19.05l/s for a 1 in 100 year + 40% climate change storm event is approximately 3,562m³, which will to be confirmed during detailed design.

4.135 The proposed surface water strategy will be developed to utilised sustainable drainage techniques (SuDS) to attenuate surface water at source and reduce risk of downstream flooding.

4.136 Due to existing ground conditions and area of limited landscaping across the existing Site, the use of SuDS such as detention basins or ponds are not suitable, therefore the proposed strategy includes the use of blue roofs, high level podiums attenuation and below ground attenuation tanks. Each phase will have a separate drainage network. The breakdown of which across each phase is presented below.

Phase A Strategy – Detailed Planning Application

4.137 Phase A is divided into 3 different locations therefore it is proposed that Block I1, J1, F1 H1 & H2 and H3 will drain separately into the closes Thames Water sewer. Each separate drainage strategy for Phase A is further discussed below.

4.138 Block I1 – Surface water drainage strategy proposes a blue roof and a below ground attenuation tank. The approximate volume of attenuation for this building is 69m³. Of which 34.2m³ attenuation is provided by cellular attenuation crates and 35m³ is provided by the blue/green roof.

4.139 Block J1 - The proposed surface water drainage strategy proposed the use of a below ground attenuation tank. It is proposed to discharge surface water from Building J1 via gravity into Thames Water combined water sewer in Leven Road (TWMH3602) via a new connection. The approximate required storage for building J1 is 346m³ this is to be provided through the proposed cellular attenuation crates.

4.140 Block F1 –blue roofs, high level podium attenuation and a below ground attenuation tank are proposed. The approximated volume of attenuation is 184m³. It is proposed that a new connection will be made to the southeast corner of the building, branching into the Thames Water combined water sewer in Aberfeldy Street between manholes TWMH4313 & TWMH4312.

4.141 Block H1 /H2 and H3 – The proposed surface water drainage includes two below ground attenuation tanks (one tanks serving Building H1 and H2 and the other tank serving Building H3) and blue / green roof areas. The approximate volume of attenuation for buildings H1&H2 is 161m³, of which 49m³ is provided through the blue roof and 112m³ is provided through the below ground cellular attenuation crates. The approximate volume of attenuation for building H3 is 135m³, of which 24m³ is provided through the blue roof and 111.2m³ is provided through the below ground cellular attenuation crates.

4.142 Subject to CCTV conclusions, the proposed strategy thus far is to use new connections. If existing connections are identified, then there maybe the opportunity to reuse. This will be explored further within the detailed design elements.

Phase B Strategy – Outline Planning Application

4.143 The proposed surface water strategy for the Phase B utilises sustainable drainage systems (SuDS) to attenuate surface water at source and reduce the risk of downstream flooding of the Thames Water sewer

network. The strategy will also utilise a combination of blue roofs, high level podium attenuation and attenuation tanks.

4.144 The proposed strategy for this area of the Proposed Development includes a total of three new connections to the existing Thames Water combined sewer network (subject to CCTV surveys);

- One connection to the Thames Water combined sewer network in Leven Road (TWMH3605), through a new connection serving the adjacent Block A1/A2 receiving a restricted discharge rate of 1.5l/s.
- One connection to the Thames Water combined sewer network in Abbott Road (TWMH3517 to TWMH2536), through a new connection serving Block A3, B1/B2 & B4 receiving a total restricted discharge rate of 3.5l/s.
- One connection to the Thames Water combined sewer network in Abbott Road (TWMH3516), through a new connection serving Blocks B3 and B5 receiving a total restricted discharge rate of 2.3l/s.

4.145 To achieve the proposed discharge rates of 7.3l/s it an approximate volume of 862m³ will require attenuation..

Phase C Strategy – Outline Planning Application

4.146 The primary source of attenuation for Phase C will be below ground attenuation tanks with further attenuation to be provided via blue roofs and high levels podium attenuation.

4.147 A new connection to the Thames Water network in Ettrick Street is proposed (TWMH4303), subject to a CCTV survey to identify an existing sewer and their state.

4.148 Each block will attenuate and restrict flows separately before connecting to TWMH4303, the below summarises the proposed discharge rates and attenuation required for each block within phase C.

- Block C1/C2/C3/C4 will restrict discharge rate to 1.5l/s requiring a total 651m³ attenuation of which 425m³ is to be provided through below ground cellular attenuation crates and 238m³ provided via blue roofs and high levels podium attenuation.
- Block C5 & C6 have been designed to have a shared flow control structure limiting discharge to 1l/s with attenuation however split both buildings to receive 10m³ attenuation provided through below ground cellular attenuation crates. Flows from Blocks C5 and C6 are to be conveyed into a combined running along Ettrick Street to the east before discharging into TWMH4303.
- Block E1/E2/E3 the discharge rate will be restricted to 1.5l/s. This will require a total 563m³ attenuation of which 400.4m³ is to be provided via below ground cellular attenuation crates and 162m³ provided via blue roofs and high levels podium attenuation.

4.149 The total amount of attenuation to be provided for this phase will be 1,233m³.

Phase D Strategy – Outline Planning Application

4.150 The proposed surface water drainage strategy for the building Phase D has been made sustainable using a below ground attenuation tank and blue roofs and high levels podium attenuation.

4.151 A new connection to the Thames Water combined water sewer in Ettrick Street (TWMH4302).

4.152 The approximate volume of attenuation for Phase D is 576m³, of which 490m³ is to be provided via below ground attenuation crates and 87m³ provided via and blue roof attenuation.

Proposed Discharge Rates Summary

4.153 Table 4.11 shows a breakdown of the volume of surface water drainage required to suit a 1 in 100-year storm event + 40% climate change, the proposed discharge rates and required attenuation volumes.

Table 4.11 Proposed Surface Water Discharge Rates

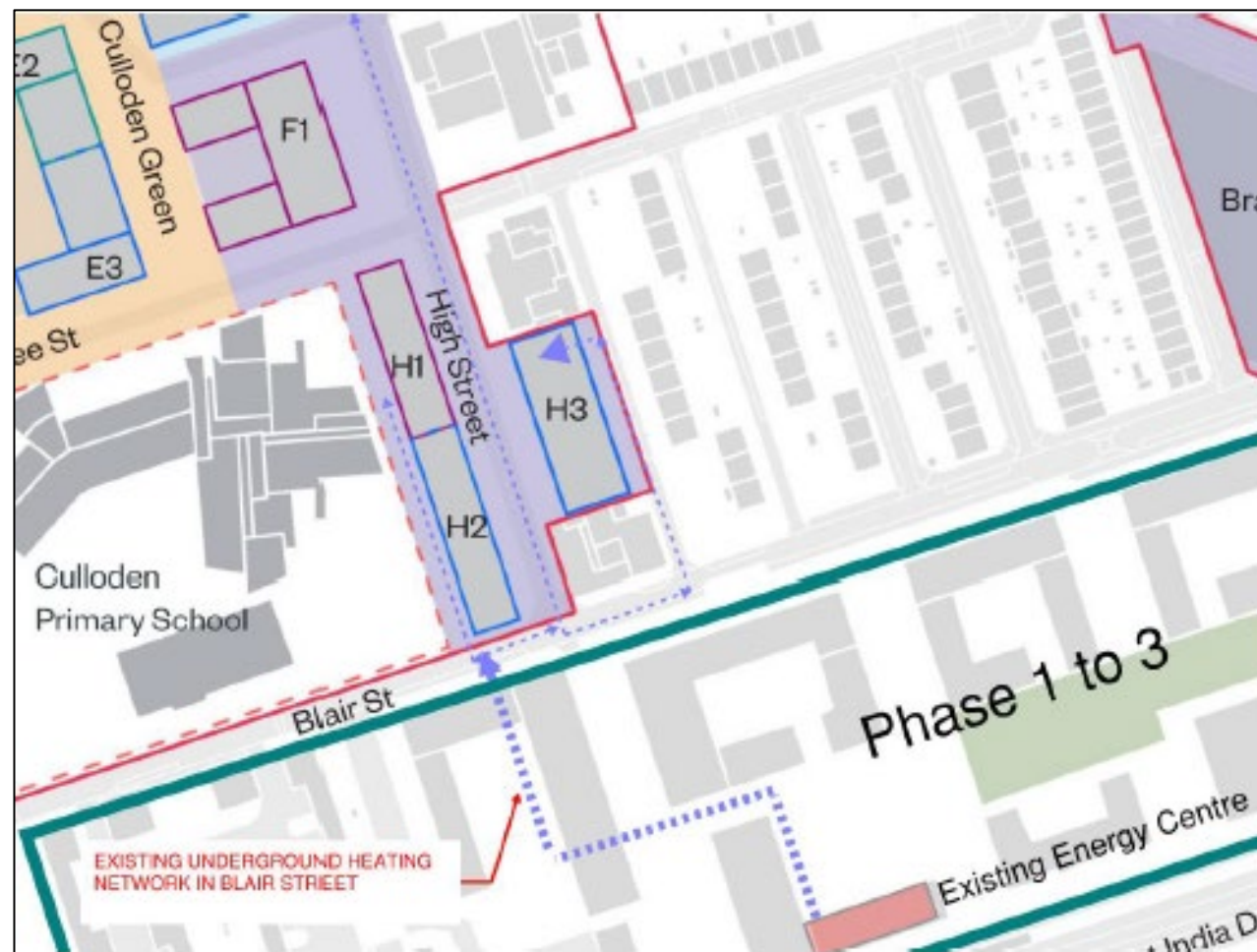
Phase	Storm Event	Proposed Discharge Rate (l/s)	Required Surface Water Attenuation (m ³)
Phase A (Blocks I1, J1, F1, H1&H2 and H3)	1 in 100 year + 40% CC	6.25	896
Phase B	1 in 100 year + 40% CC	7.3	865

Phase C	1 in 100 year + 40% CC	4	1231
Phase D	1 in 100 year + 40% CC	1.5	576
TOTAL		19.05	3,568

Energy Strategy

- 4.154 The energy strategy has been designed to ensure that opportunities to make use of the waste heat from neighbouring sites can be taken up. The below details the energy strategy across the detailed and outline elements of the planning application. **Figure 4. 26** illustrates the energy strategy across Phase A
- 4.155 Detailed Application: Buildings H1-3 and F in Phase A will connect to the existing energy centre delivered as part of the earlier phases of the previous planning application in 2021. The energy centre has spare capacity and will accommodate the buildings referred to above. Once the energy centre reaches the end of its life, it will move away for the use of fossil fuels. Buildings I and J will be provided with their own air source heat pumps (ASHP's) and water-source heat pumps (WSHP's) and will be independent from the wider energy strategy.
- 4.156 Outline Application: A new energy centre will be constructed and delivered as part of Phase B. The energy centre will be located within the base of Building A1-A2 and will be served by ASHP's on the roof of Building A1. The energy centre for the outline application will distribute heat intake rooms serving each of the apartment buildings. The hot water will then be distributed across individual heat intake units for each of the homes and non-residential units.

Figure 4.26 Indicative Sustainability and Energy Strategy



Wind Mitigation

4.157 Wind microclimate mitigation measures will be required to ensure that the wind conditions within the Proposed Development are suitable for the intended use throughout the year, however these will need to be determined through further testing of the Proposed Development at the Reserved Matters stage. An illustrative scheme was tested in order to demonstrate that a scheme with an appropriate wind environment could be achieved within the parameters and this is demonstrated in **ES Volume 1, Chapter 13: Wind Microclimate**.

ILLUSTRATIVE SCHEME

- 4.158 As set out in ES Volume 1, Chapter 2: EIA Methodology the illustrative scheme has been considered in **ES Volume 1, Chapter 6: Socio-Economics, ES Volume 1, Chapter 13: Wind Microclimate** and **ES Volume 1, Chapter 14: Daylight, Sunlight, Overshadowing and Solar Glare**. These assessments take account of the massing of the illustrative scheme, which is shown in Figure 4.28 below.
- 4.159 The amount of development proposed as part of the Illustrative scheme per use class for the is provided within **Table 4.12**.

Table 4.12 Illustrative Scheme Land Uses (m²)

Land Use	GIA (m ²)	GEA (m ²)
Residential	147,444.4	162,901.2
Workspace	2,369.1	2,812.9
Retail	2,366.2	2,585.7
Marketing	295	317
TOTAL	152,474.7	168,616.8

4.160 The Illustrative Scheme comprises 147,444.4m² GIA of residential floorspace and total of 1,595 residential units. **Table 4.13** presents the Indicative Illustrative scheme housing mix.

Table 4.13 Illustrative Scheme Housing Mix

Unit Type	No. of Private	No. of Socially Rented	No. of Intermediate	Total
Studio	117	-	-	117
1 Bedroom	446	72	40	558
2 Bedroom	583	109	36	728
3 Bedroom	29	130	-	159
4 Bedroom	-	29	-	29
5 Bedroom	-	-	-	-
6 Bedroom	-	4	-	4
TOTAL	1,175	344	76	1,595

Figure 4.27 Illustrative Scheme

