

## 4.6 Facade & Materiality

### Existing Context

The predominant material palette of the area is red-brown brick and clay tile, with occasional white stucco or timber or PVC weather boarding. Roofs are typically brown clay tiles with brick chimneys. Historically many of the materials would have been sourced locally using wealden clay, including from the former tile works in Keymer.

### Upper Levels

The upper-level walls and roof will be clad in Keymer tiles, handmade clay tiles known for their natural color variations, which add visual interest to the roof and façade. Their tones and textures harmonize seamlessly with the surrounding context.

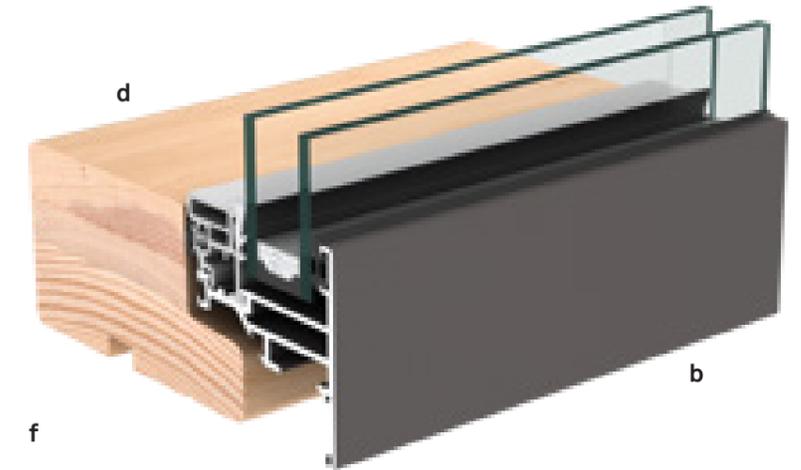
### Ground Level

The ground-level material palette is designed to emphasize the horizontal banding seen in the neighboring shopping promenade. A combination of natural timber and robust insitu concrete is proposed.

The consistent timber windows across all levels visually consolidate the façades.

### Material Palette

- a Keymer Peg Tiles, Antique Finish
- b Powder coated Aluminium, medium grey
- c Sustainably sourced timber, clear oil finish
- d Insitu Concrete, local aggregate, natural finish
- e Tumbled Grey Limestone Cobbles
- f Wood-Aluminium DGU Window System



# 4.7 Unit Mix

## Mix of Apartments

the proposed 26 apartments are split into:

- no 8 1b-2p apartments
- no 15 2b-3p apartments
- no 3 3b-5p apartments
- plus 1 guest bedroom

## Unit Mix

The apartment offering at the heart of the village is designed to appeal to a cross-section of potential future residents. While the focus is yet to be decided, this could be from retirees aiming to downsize to young families wanting and enjoy the convenience of village life. Further community engagement will help shape this aspect of the scheme.

With regard to tenure, the relatively small number of residential units within the scheme that would form an affordable proportion may be too limited to be viably managed by a Housing Association/RSL. If this were to be the case, a contribution to Mid-Sussex District Council for off-site affordable housing would be made.

| Area Summary |             |              |             |             |
|--------------|-------------|--------------|-------------|-------------|
| Level        | GEA         | GEA exterior | GIA         | NIA         |
| L0           | 335         | 656          | 307         | 190         |
| L1           | 874         | 208          | 826         | 698         |
| L2           | 828         | 61           | 781         | 678         |
| L3           | 705         | 45           | 668         | 582         |
| <b>Total</b> | <b>2742</b> | <b>970</b>   | <b>2582</b> | <b>2148</b> |

| Net        |             | Not Net     |                |           |
|------------|-------------|-------------|----------------|-----------|
| Class E/F1 | Resi        | Circulation | Plant + Risers | Refuse    |
| 190        | 0           | 72          | 4              | 27        |
| 0          | 698         | 83          | 0              | 0         |
| 0          | 678         | 60          | 0              | 0         |
| 0          | 582         | 53          | 0              | 0         |
| <b>190</b> | <b>1958</b> | <b>268</b>  | <b>4</b>       | <b>27</b> |

| Exterior GEA |                   |
|--------------|-------------------|
| Parking      | Terrace / Balcony |
| 656          | 0                 |
| 0            | 208               |
| 0            | 61                |
| 0            | 45                |
| <b>656</b>   | <b>314</b>        |

| Units     | Residential Mix |           |          |                  |
|-----------|-----------------|-----------|----------|------------------|
|           | 1b-2p           | 2b-4p     | 3b-5p    | 1b-2p guest room |
| 0         | 0               | 0         | 0        | 0                |
| 8         | 2               | 5         | 1        | *                |
| 9         | 2               | 5         | 2        | 0                |
| 9         | 4               | 5         | 0        | 0                |
| <b>26</b> | <b>8</b>        | <b>15</b> | <b>3</b> | <b>0</b>         |

| L0 Class E Units |              |
|------------------|--------------|
| Unit No.         | NIA          |
| 1                | 91           |
| 2                | 99.2         |
|                  |              |
|                  |              |
|                  |              |
|                  |              |
|                  |              |
|                  |              |
|                  |              |
| <b>Total</b>     | <b>190.2</b> |

| L1 Apartments |              |
|---------------|--------------|
| Unit No.      | NIA          |
| 1.1           | 72.5         |
| 1.2           | 76.2         |
| 1.3           | 76.2         |
| 1.4           | 92.6         |
| 1.5           | 29.4         |
| communal*     | 63.9         |
| 1.6           | 62.1         |
| 1.7           | 62.1         |
| 1.8           | 86.2         |
| 1.9           | 77.1         |
| <b>Total</b>  | <b>698.3</b> |

| L2 Apartments |              |
|---------------|--------------|
| Unit No.      | NIA          |
| 2.1           | 72.5         |
| 2.2           | 76.2         |
| 2.3           | 76.2         |
| 2.4           | 92.6         |
| 2.5           | 90.9         |
| 2.6           | 55.9         |
| 2.7           | 55.9         |
| 2.8           | 80.5         |
| 2.9           | 77.1         |
| <b>Total</b>  | <b>677.8</b> |

| L3 Apartments |              |
|---------------|--------------|
| Unit No.      | NIA          |
| 3.1           | 50.6         |
| 3.2           | 71.7         |
| 3.3           | 71.7         |
| 3.4           | 73.7         |
| 3.5           | 71.6         |
| 3.6           | 54.5         |
| 3.7           | 54.5         |
| 3.8           | 77.6         |
| 3.9           | 56.2         |
| <b>Total</b>  | <b>582.1</b> |

## Communal Facilities

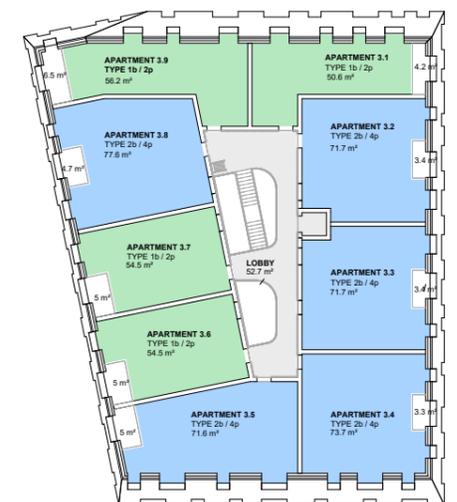
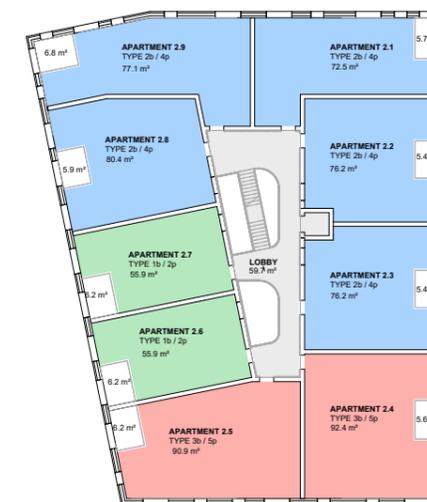
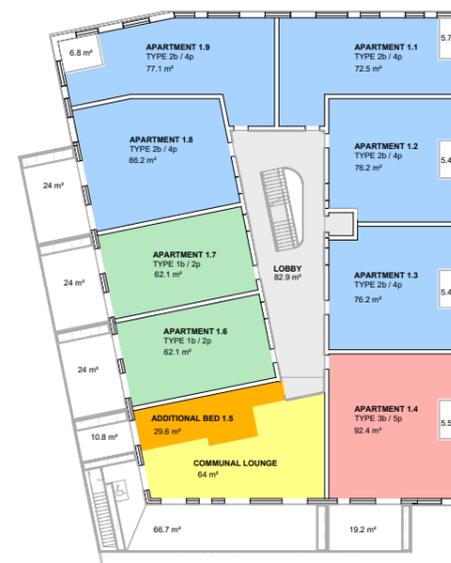
At first floor a communal space and terrace is proposed available to residents as a shared semi-private communal space.

The terrace is south-facing allowing all residents to access a larger, south facing external amenity space.

An additional guest bedroom and bathroom are included within the communal area. This would be a bookable room for short-term hosting of a visiting family member or friend.

## Class E/F1 Commercial Units

Retain employment on the site and connect along the Keymer Road shopping street.



## 4.8 Environmental Credentials

A high-level assessment of the proposal against Building Research Establishment's Home Quality Mark (HQM), is outlined in the adjacent table.

As indicated, the majority of assessment issues are targeted with a small number partly targeted.

The scheme is in an opportune position with the ability to incorporate a variety of sustainable design responses and technologies to enhance its environmental credentials.

| SECTION          | CATEGORY                       | ASSESSMENT ISSUE                                    | CREDITS                 | COMMENTS                 |          |
|------------------|--------------------------------|---|-------------------------|--------------------------|----------|
| OUR SURROUNDINGS | 1 TRANSPORT & MOVEMENT         | 1.1 Public Transport Availability                   | 15                      | targeted                 |          |
|                  |                                | 1.2 Sustainable Transport Options                   | 17                      | targeted                 |          |
|                  |                                | 1.3 Local Amenities                                 | 16                      | targeted                 |          |
|                  | 2 OUTDOORS                     | 2.1 Identifying Ecological Risks and Opportunities  | 7                       | targeted                 |          |
|                  |                                | 2.2 Managing Impacts on Ecology                     | 9                       | targeted                 |          |
|                  |                                | 2.3 Ecological Change and Enhancement               | 12                      | targeted                 |          |
|                  |                                | 2.4 Long Term Ecological Management and Maintenance | 8                       | targeted                 |          |
|                  |                                | 2.5 Recreational Space                              | 22                      | partially targeted       |          |
|                  | 3 SAFETY & RESILIENCE          | 3.1 Flood Risk                                      | 19                      | targeted                 |          |
|                  |                                | 3.2 Managing Rainfall Impacts                       | 19                      | targeted                 |          |
|                  |                                | 3.3 Security  | 9                       | targeted                 |          |
|                  | MY HOME                        | 4 COMFORT   | 4.1 Indoor Pollutants   | 12                       | targeted |
|                  |                                |   | 4.2 Daylight            | 13                       | targeted |
|                  |                                |   | 4.3 Noise Sources       | 4                        | targeted |
|                  |                                |   | 4.4 Sound Insulation    | 9                        | targeted |
| 4.5 Temperature  |                                |   | 17                      | targeted                 |          |
| 4.6 Ventilation  |                                |   | 13                      | targeted                 |          |
| 5 ENERGY         |                                | 5.1 Energy and Carbon Performance                   | 60                      | targeted                 |          |
|                  |                                | 5.2 Decentralised Energy                            | 8                       | targeted                 |          |
|                  |                                | 5.3 Impact on Local Air Quality                     | 15                      | targeted                 |          |
| 6 MATERIALS      |                                | 6.1 Responsible Sourcing                            | 25                      | targeted                 |          |
|                  |                                | 6.2 Environmental Impact of Materials               | 25                      | targeted                 |          |
|                  |                                | 6.3 Life Cycle Costing                              | 12                      | targeted                 |          |
|                  |                                | 6.4 Durability                                      | 7                       | targeted                 |          |
| 7 SPACE          |                                | 7.1 Drying Space                                    | 3                       | targeted                 |          |
|                  |                                | 7.2 Access and Space                                | 11                      | targeted                 |          |
|                  |                                | 7.3 Recyclable Waste                                | 10                      | targeted                 |          |
| 8 WATER          |                                | 8.1 Water Efficiency                                | 17                      | targeted                 |          |
| DELIVERY         |                                | 9 QUALITY ASSURANCE                                 | 9.1 Project Preparation | 6                        | targeted |
|                  | 9.2 Commissioning and Testing  |   | 22                      | targeted with contractor |          |
|                  | 9.3 Inspections and Completion |   | 16                      | targeted with contractor |          |
|                  | 10 CONSTRUCTION IMPACTS        | 10.1 Responsible Construction Practices             | 5                       | targeted with contractor |          |
|                  |                                | 10.2 Construction Energy Use                        | 5                       | targeted with contractor |          |
|                  |                                | 10.3 Construction Water Use                         | 5                       | targeted with contractor |          |
|                  |                                | 10.4 Site Waste Management                          | 15                      | targeted with contractor |          |
|                  | 11 CUSTOMER EXPERIENCE         | 11.1 Aftercare                                      | 4                       | targeted                 |          |
|                  |                                | 11.2 Home Information                               | 0                       | targeted                 |          |
|                  |                                | 11.3 Smart Homes                                    | 8                       | partially targeted       |          |
|                  |                                | 11.4 Post Occupancy Evaluation                      | 10                      | n/a                      |          |

# 4.9 Facade Design

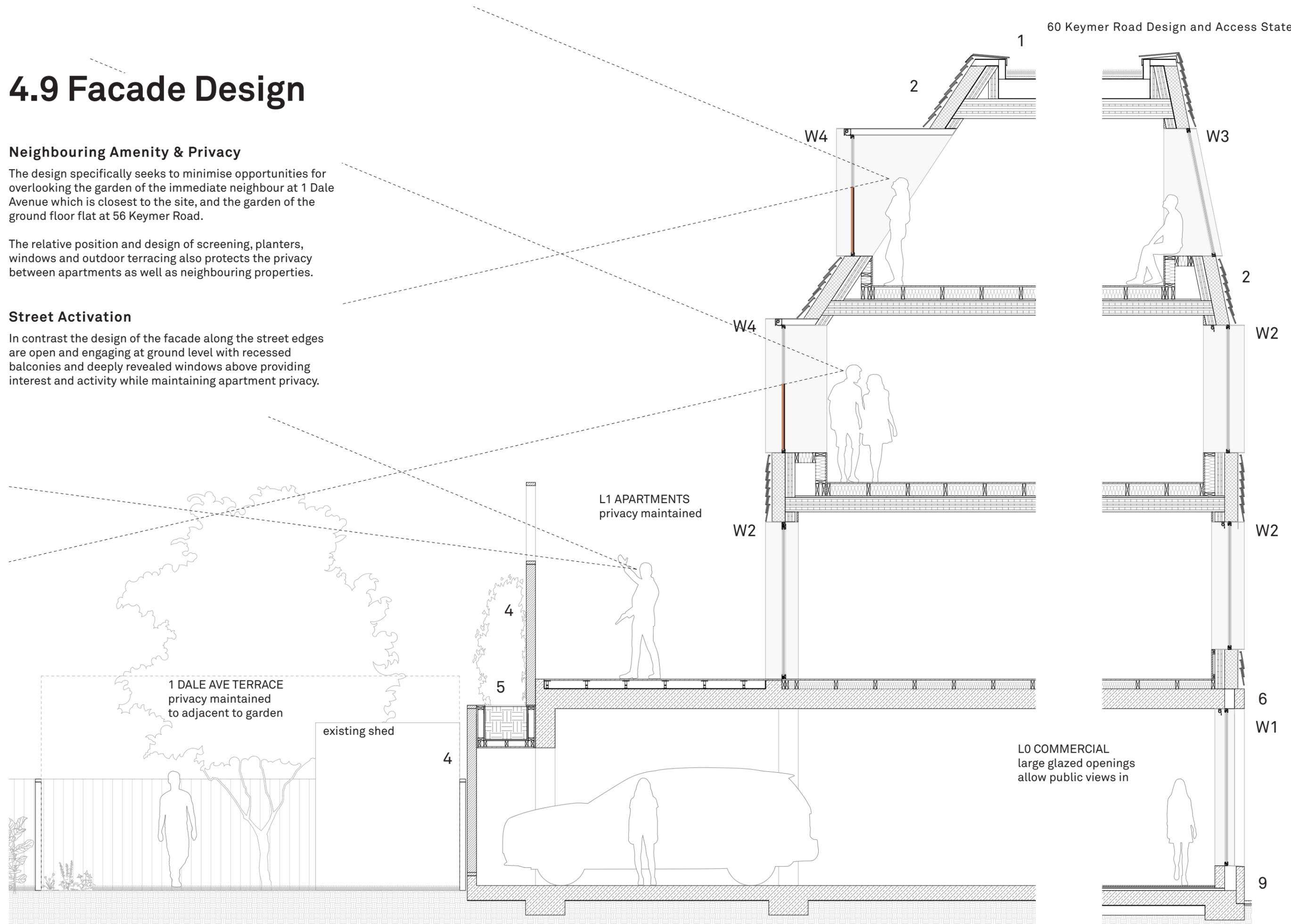
## Neighbouring Amenity & Privacy

The design specifically seeks to minimise opportunities for overlooking the garden of the immediate neighbour at 1 Dale Avenue which is closest to the site, and the garden of the ground floor flat at 56 Keymer Road.

The relative position and design of screening, planters, windows and outdoor terracing also protects the privacy between apartments as well as neighbouring properties.

## Street Activation

In contrast the design of the facade along the street edges are open and engaging at ground level with recessed balconies and deeply revealed windows above providing interest and activity while maintaining apartment privacy.



# 4.10 Sustainable Construction

## Structural Approach

Cross laminated timber (CLT) above single story of steel reinforced concrete is well suited to a residential building with parking and retail at the ground floor. The combination of structural systems exploits the different materials characteristic advantages:

## Durability

The resilience of concrete is well suited to the flood risk ground floor and public and car accessible areas. Whereas exposed CLT is a suitably robust finish within the apartments

## Low-carbon construction methodology

CLT has a lower embodied energy per weight than many other building materials while also providing warm and natural tactility.

## Light weight

CLT floors and walls are a light weight construction system. The lighter the structure, the less energy intensive concrete and steel reinforcing is required in the building's foundations and base

## Prefabrication

CLT systems are an assembly of prefabricated panels which are made off-site and lifted into place. Consequently this often affords quick site assembly in contrast to more traditional systems which require pumped concrete.

## Fire and Acoustics

Concrete effectively separates the base level uses from the apartments above. On the residential levels CLT floors and walls can be designed to achieve a fire rating of 120mins and the acoustic properties can be used to achieve BCO standards for structural borne vibrations and noise transmission.



## Indicative Building Elements

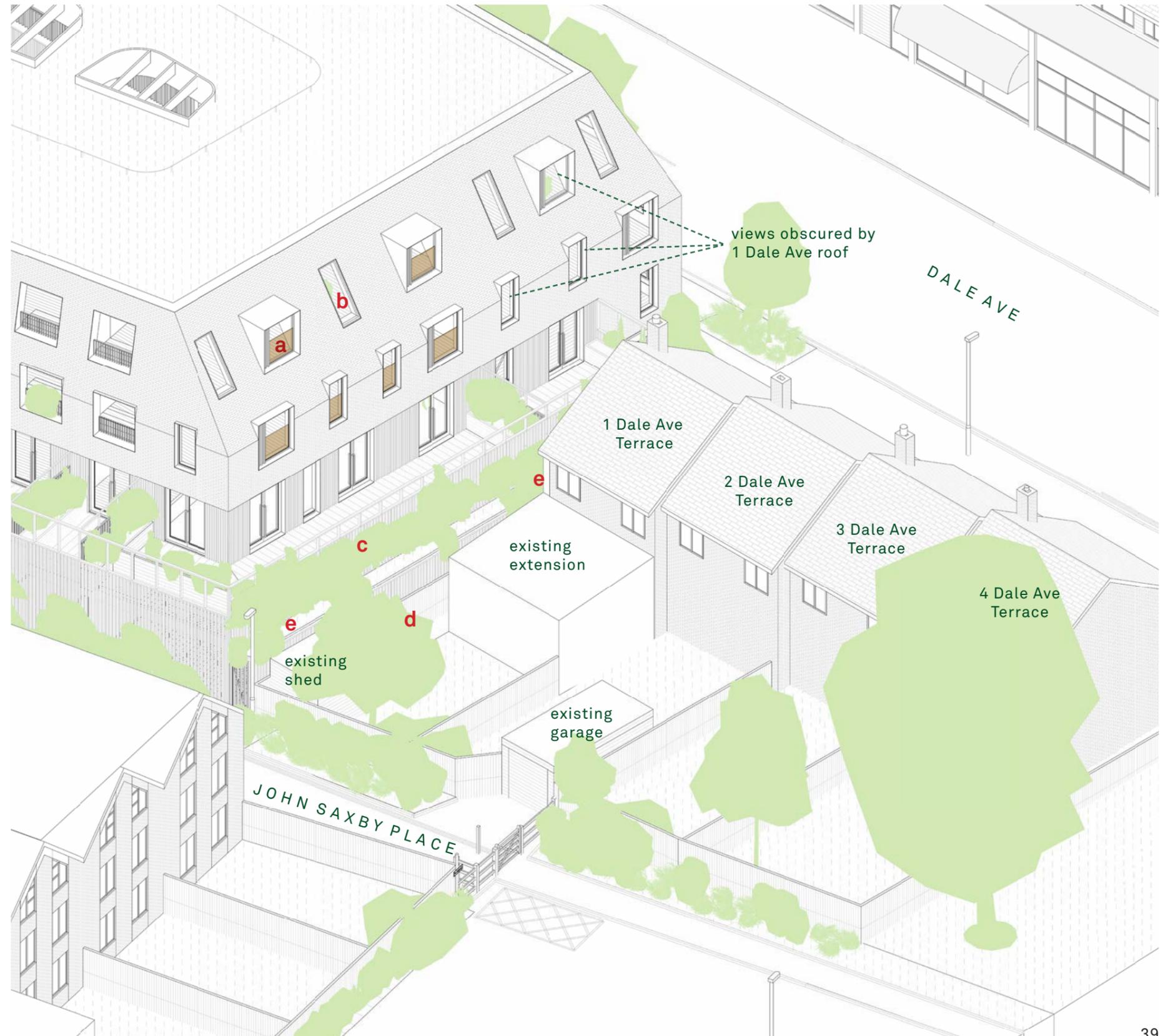
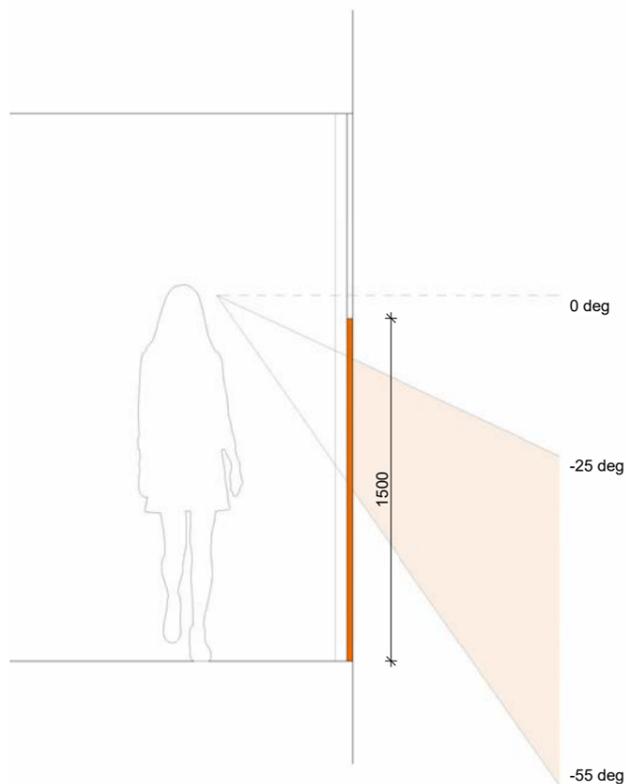
|    |            |  |
|----|------------|--|
| 1  | 150        | green roof   |
|    | -          | WPM  |
|    | 300        | insulation   |
|    | -          | WPM  |
|    | 300        | CLT roof panel   |
| 2  | -          | keymer peg tiles   |
|    | 50         | rail system / air cavity   |
|    | 200        | insulation   |
|    | -          | breather membrane  |
|    | 150        | CLT wall panel   |
| 3  | -          | steel flats balustrade, PPC  |
| 4  | 140/45     | vertical timber slat screen, clear finish  |
| 5  | 90/45      | timber hardwood planter  |
|    | -          | WPM  |
|    | 450        | soil base and planting   |
| 6  | 300        | concrete verandah slab extension   |
|    |            | insulated thermal break  |
| 7  | 200/50     | vertical timber slats, clear finish  |
| 8  | 100/50     | vertical timber slats, clear finish  |
|    | 20         | vertical boards, clear finish  |
|    | 175        | insulation   |
|    | 150        | concrete wall  |
| 9  | 125        | precast concrete   |
|    | -          | membrane   |
|    | 175        | insulation   |
|    | 150        | concrete wall  |
| W1 | shop front | aluminium-wood window system, DGU  |
| W2 | typical    | aluminium-wood window system, DGU<br>aluminium window surround, PPC<br>*side hung vent panel, timber |
| W3 | sloping    | aluminium-wood window system, DGU  |
| W4 | dormer     | aluminium-wood window system, DGU<br>aluminium dormer surround, PPC                                  |

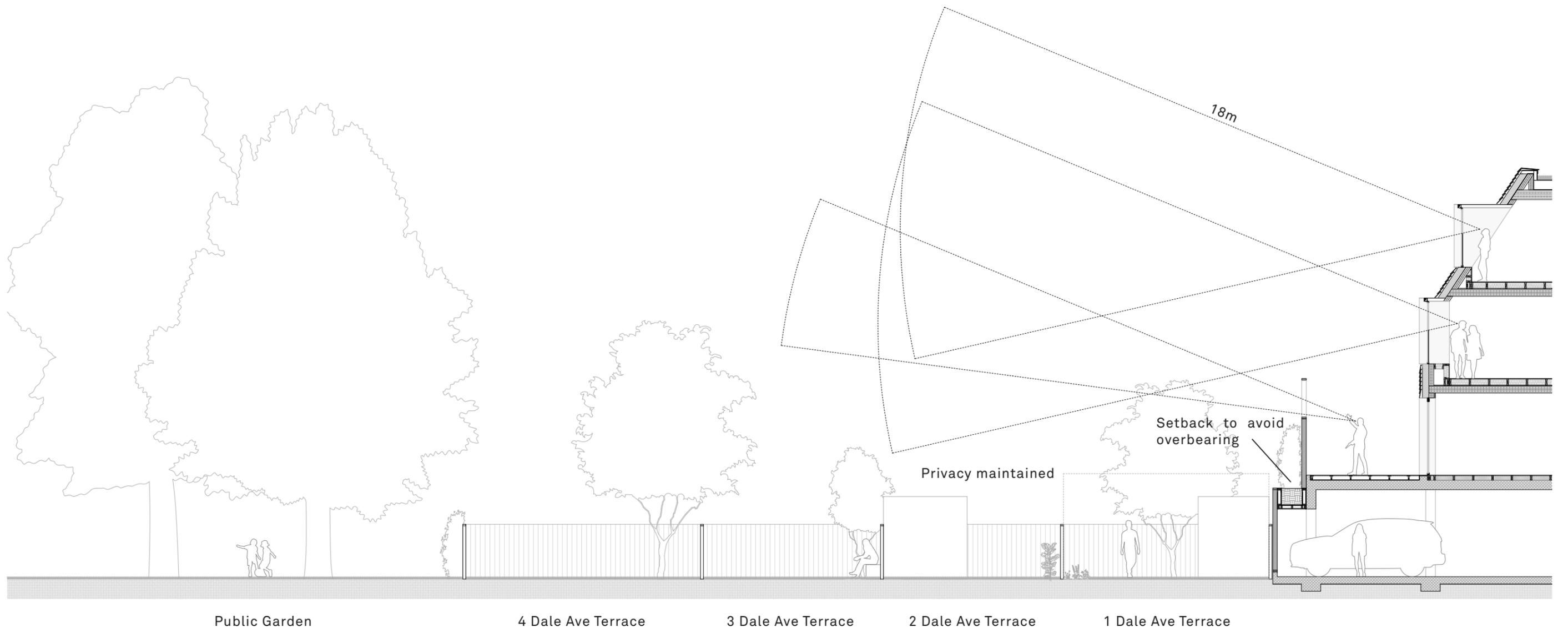
# 4.11 Avoiding overlooking and maintaining privacy

## Development

- a view control film to obscure sight lines added to south facing windows. shown on glass within 1500mm from FFL (shaded orange)
- b angled windows prevent inhabitants standing close to the window.
- c 1800mm tall balustrade to obscure sight lines.
- d L0 - 900mm setback at top of existing fence line to reduce height along boundary.
- e planter boxes positioned against boundary to enhance to public realm.

## 3M LUMISTY Solar Shield view control film:

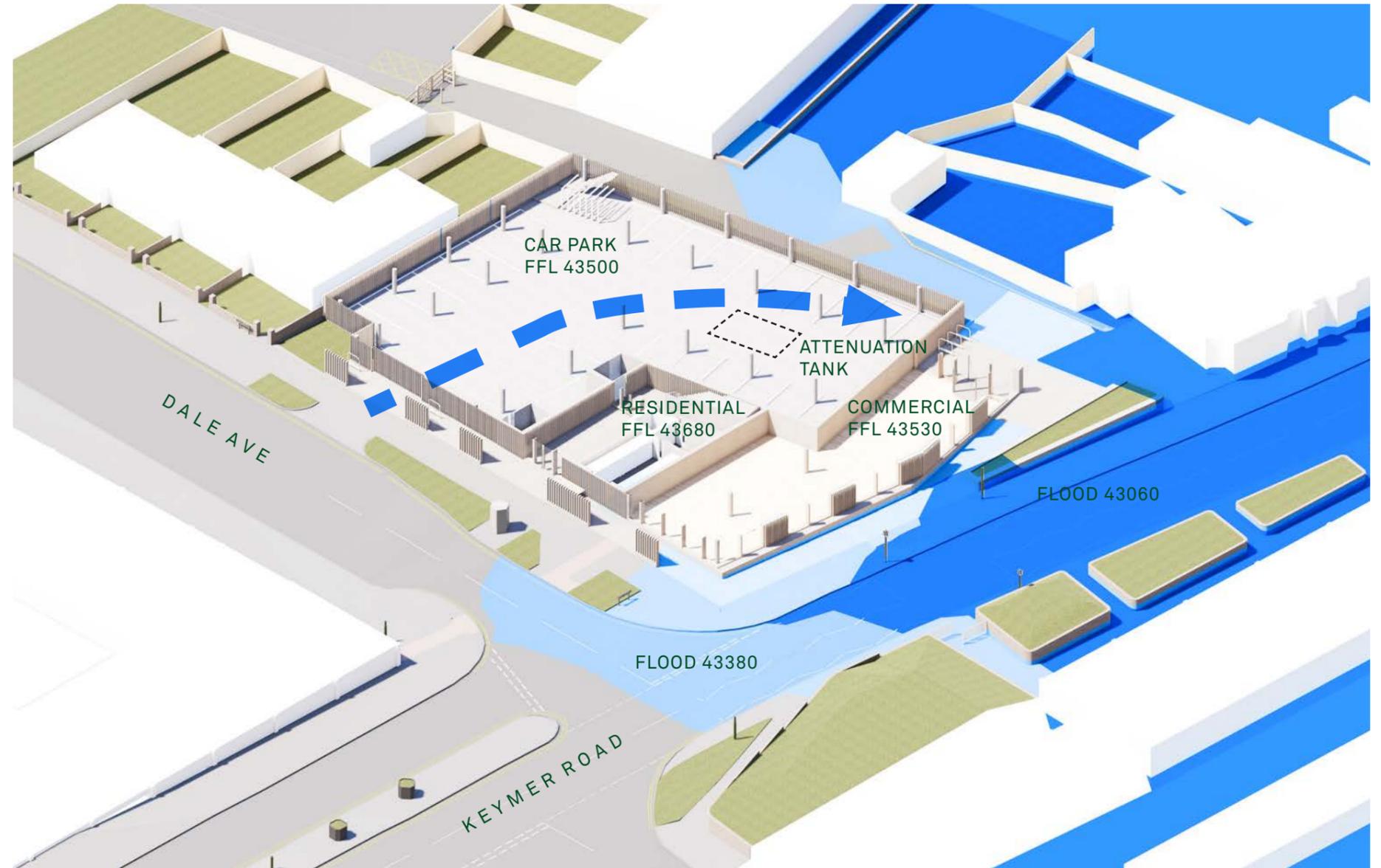




# 4.12 Flood Risk Design Summary

Refer 'Planning Considerations' for Commentary.

Coordinated in consultation with HOP Civil Engineers, Flood Risk Assessment & Drainage Assessment



## Ground Levels Summary

| Area                 | FFL      | RL 43060<br>Keymer Road Flood Level (mm) | RL 43380<br>Dale Ave Flood Level (mm) |
|----------------------|----------|--|---------------------------------------|
| Car parking Level    | RL 43500 | +440 above flood                         | +120 above flood                      |
| Residential Entrance | RL 43680 | +620 above flood                         | +300 above flood                      |
| Commercial Unit      | RL 43530 | +470 above flood                         | +150 above flood                      |

## 4.13 Exterior Precedents

Contemporary projects using materials traditionally found in Hassocks and the Weald.

- a tile facade with staggered windows  
Tikari Works - Rye Apartments
- b tile roof and facade with timber base  
Kannikegarden - Lundgaard Architects
- c grey tile facade with matching window joinery  
Design Storey / Grevel Lane
- d textured timber cladding - Farnworth House -  
Smith Young Architects



a



b



c

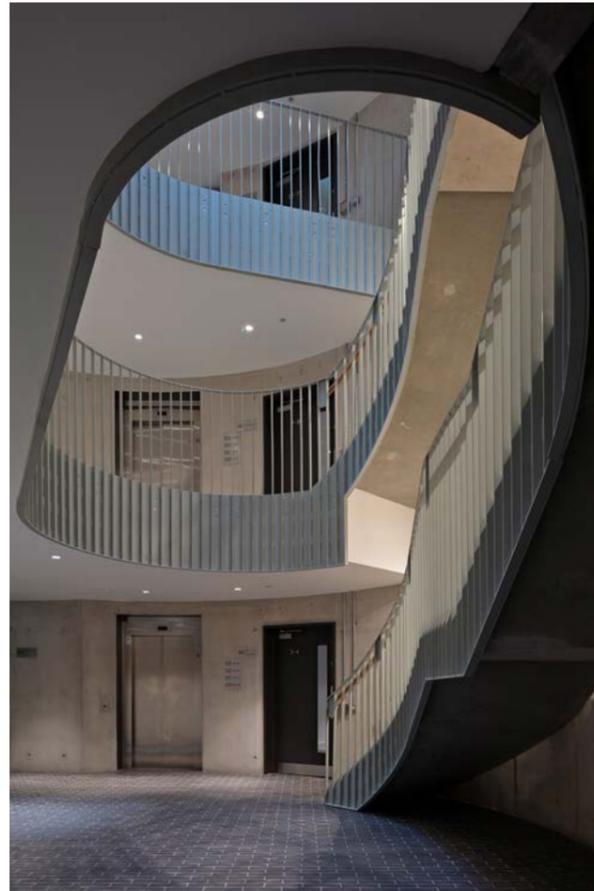


d

## 4.14 Interior Precedents

Contemporary projects exemplifying high quality interior space.

- a light filled stair well  
Henley HaleBrown - Willmott Court
- b brick entry lobby  
Sergison Bates - NewYorkResidence
- c notched apartment terrace  
Sergison Bates - NewYorkResidence
- d CLT Apartment within roof  
Tikari Works - Rye Apartments



a



b



c



d

## 4.15 Design Development CGI Views

### View East Along Keymer Road 1

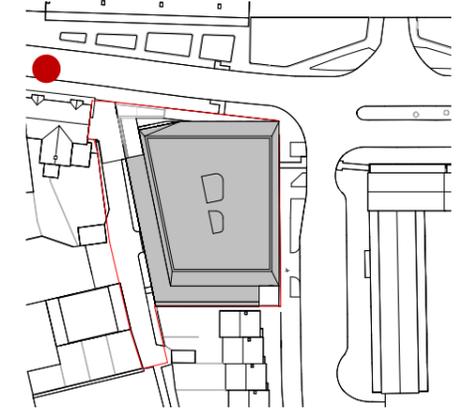


Pre App



DRP Design Development September 2024

- a** ground-level window arrangement refined to feature more vertical proportions and a smaller scale opening matching local context.
- b** first and second-floor window arrangements aligned to establish a more orthogonal rhythm and vertical proportions.
- c** building overall height reduced and east side roof angle has been increased from 11.5 degrees to 18 degrees, reducing the massing from street level.
- d** ground level commercial unit raised +150mm as per flooding assessment feedback, steps added along John Saxby Place to accommodate new higher level. Accessible path via adjacent 1:20 gradient ramp. refer plans.
- e** The lower wall material has been revised from brick to in-situ concrete in response to flood risk assessment.
- f** standalone seating has been replaced with seating along the building edge to create a more generous public footpath, enhancing the connection between the shopping promenades to Orion Parade.
- g** step added to south boundary enclosure to reduce massing along boundary to 1 Dale Ave.
- h** ground floor walls revised to timber screens and aligned with concrete junction to consolidate and simplify massing along Dale Ave.
- i** three dormers added to east facade to establish a more vertical proportions and break up roof plane to create vertical rhythm.
- j** balcony moved to west facade to increase privacy to 1-4 Dale Ave neighbours.
- k** car park replaced with garden area enhancing the public realm



## Design Development

- l North East Corner L0 refined to create larger public realm, simplify levels, and increase window frontage to John Saxby Place.
- m minor window arrangement updates with development of internal layouts
- n Bicycle store entry relocated to accommodate terrace escape stair
- o SW side of terrace screen lowered to add additional passive surveillance to John Saxby Place and add visual interest to the West Facade.

## View East Along Keymer Road 2

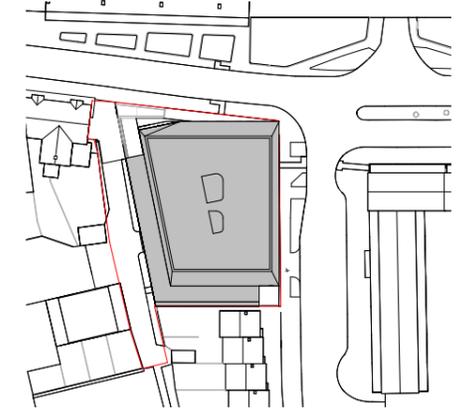


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