

7.17 Contextual Reference



Strong base expressed through textured brick and change of tone



Entrances grouped and expressed



Horizontal banding



Window headers



Pitched roofs and ornamentation



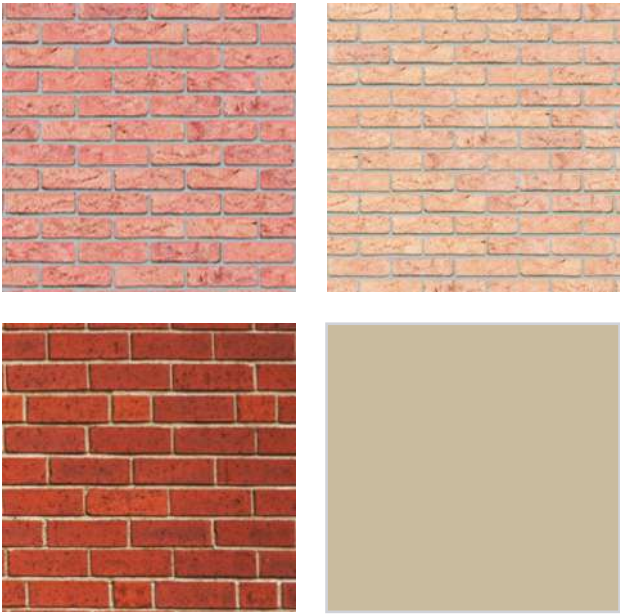
Top storey decoration/ banding

7.18 Bay Studies

Bay Study - Elevation 01



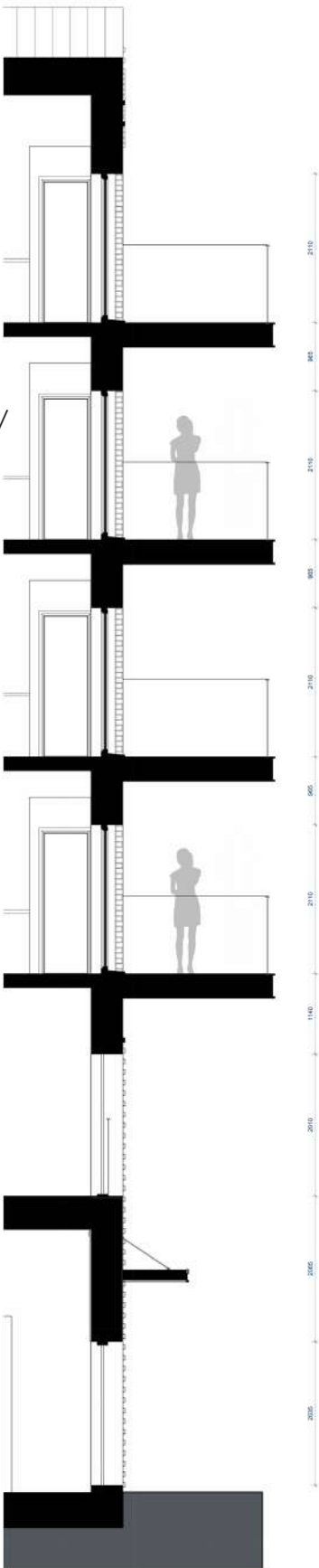
Materials



Elevation



- Muted Gold Roof - Standing Seam or Similar
- Dark Red Brick Pattern
- Dark Red Brick
- Muted Gold Framed Windows/ Doors
- Muted Gold Balcony with Solid Balustrades to Sides and Railing to Face
- Alternating Course Dark Red Brick Projection
- Muted Gold Entrance Canopy
- Muted Gold Private Entrance Door



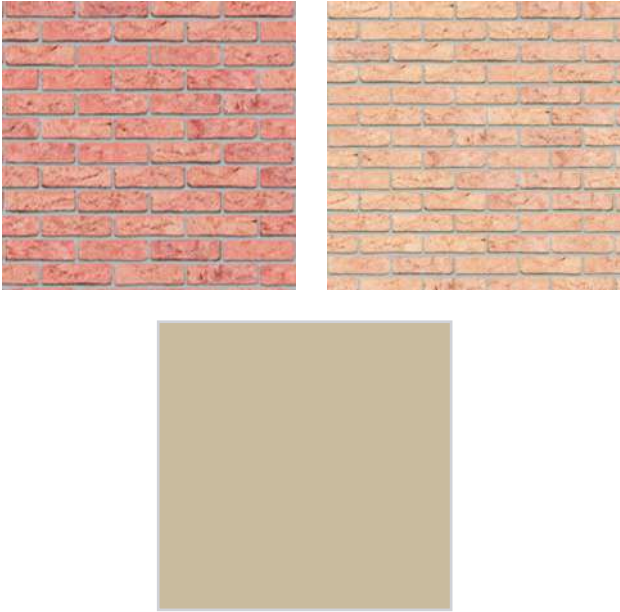
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7.18 Bay Studies

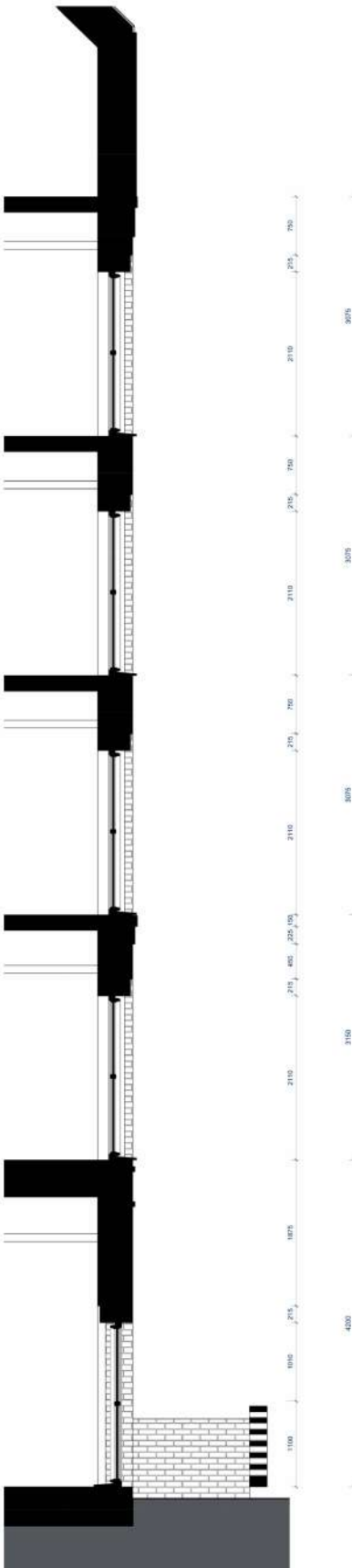
Bay Study - Elevation 02



Materials



Elevation



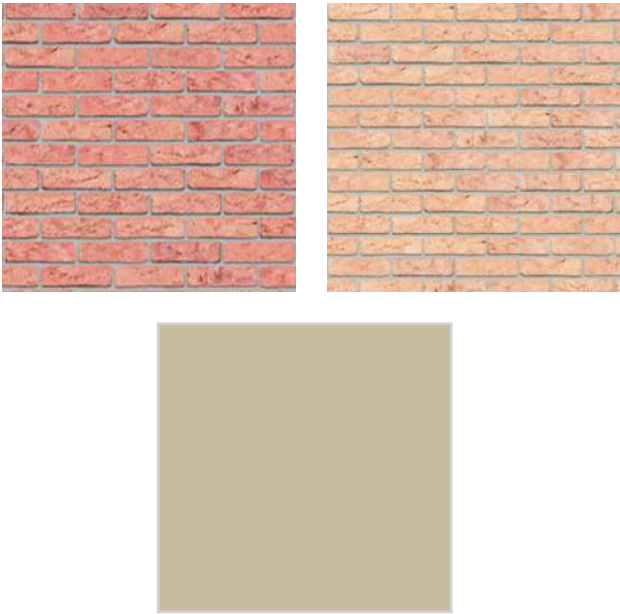
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7.18 Bay Studies

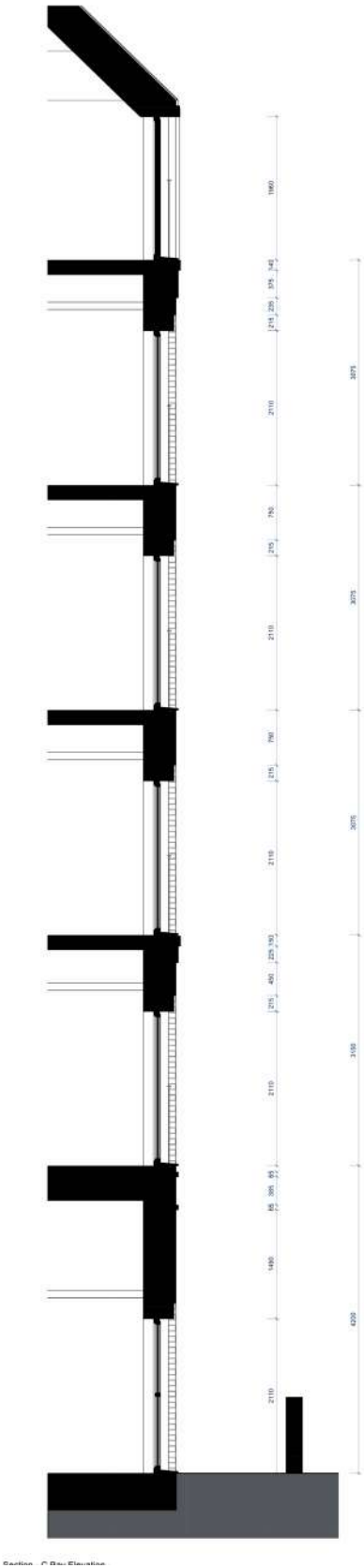
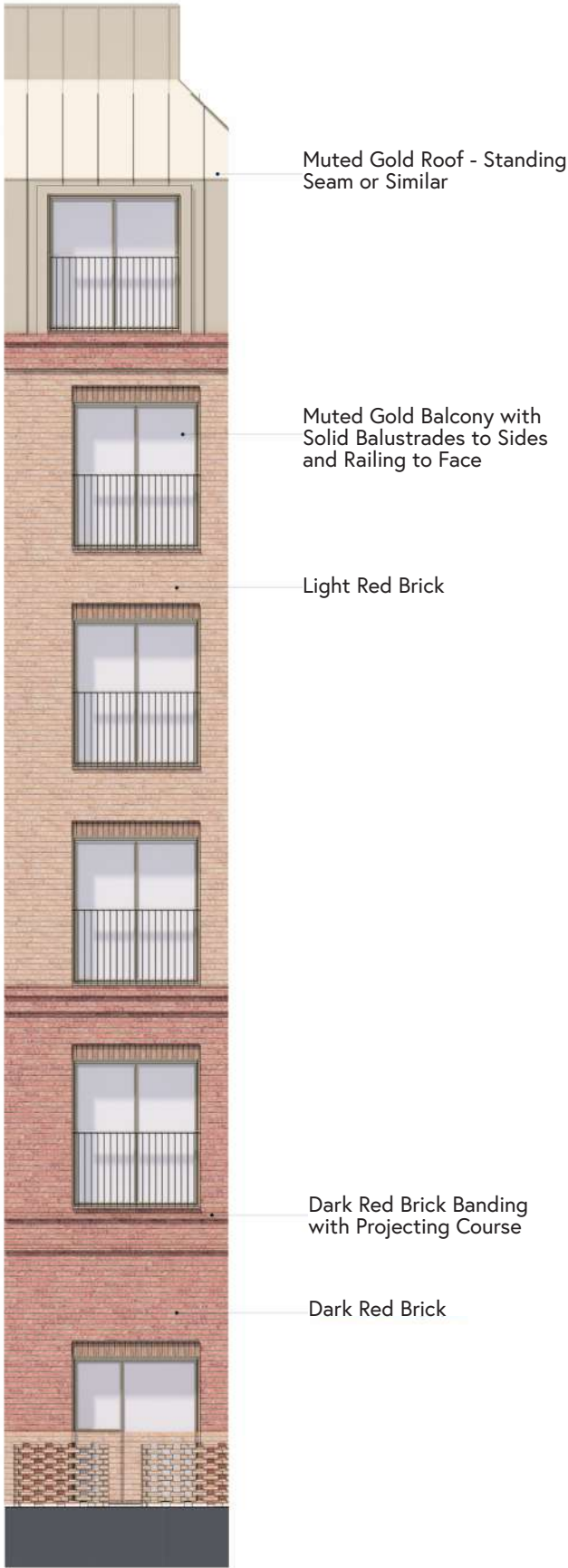
Bay Study - Elevation 03



Materials



Elevation



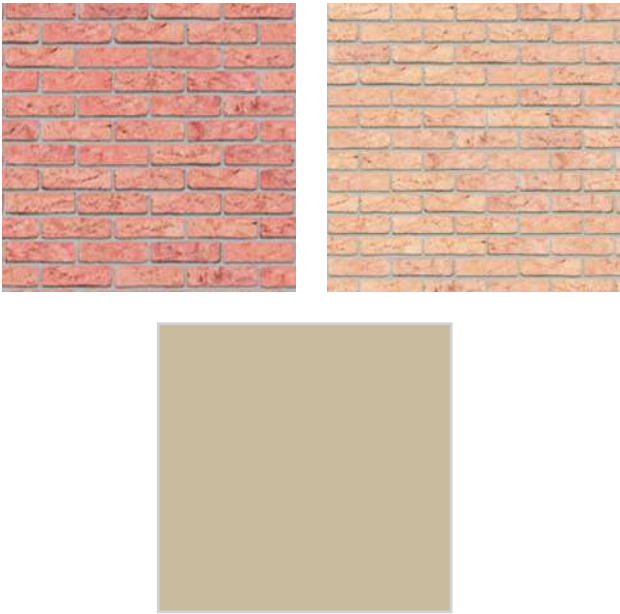
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7.18 Bay Studies

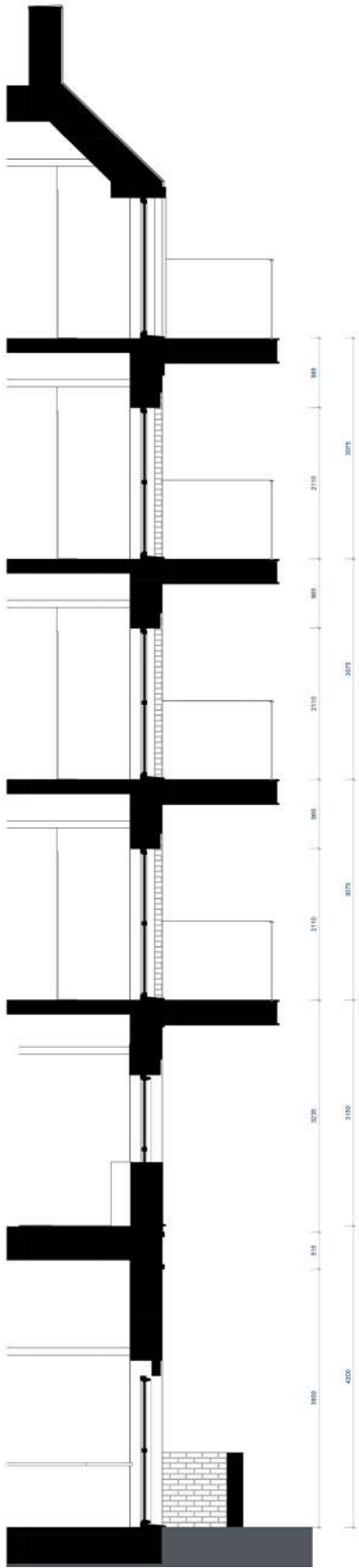
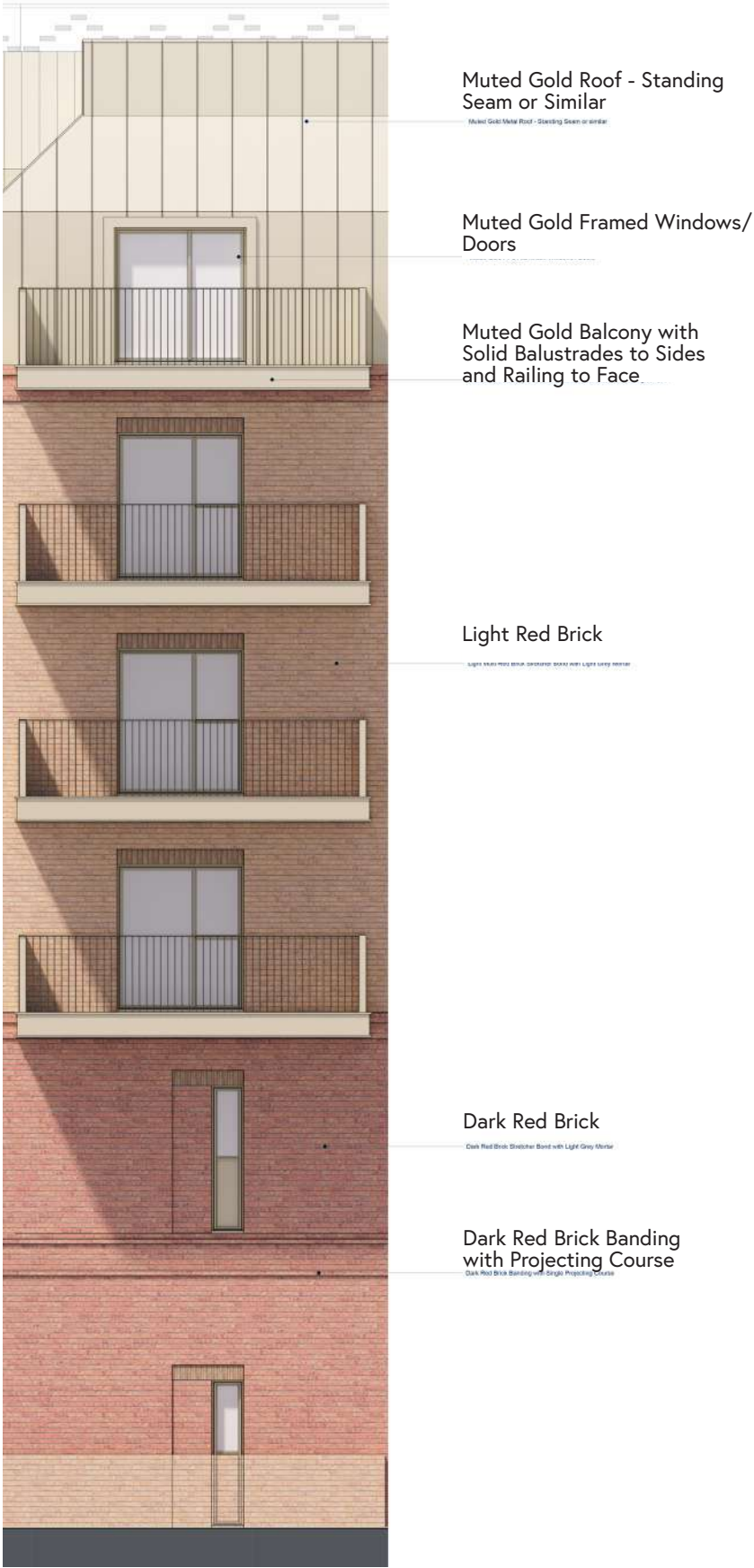
Bay Study - Elevation 04



Materials



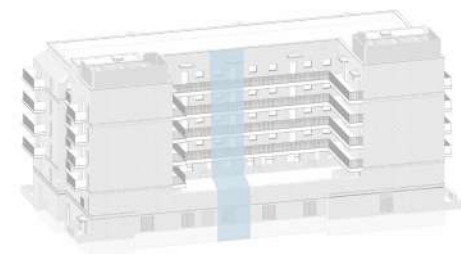
Elevation



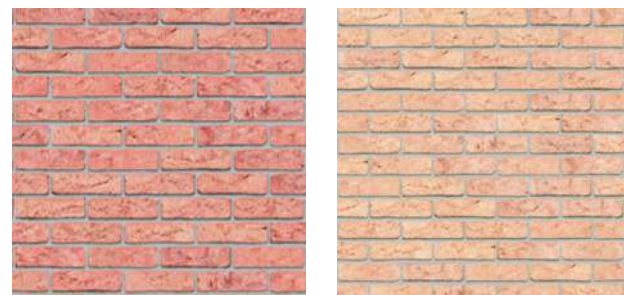
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7.18 Bay Studies

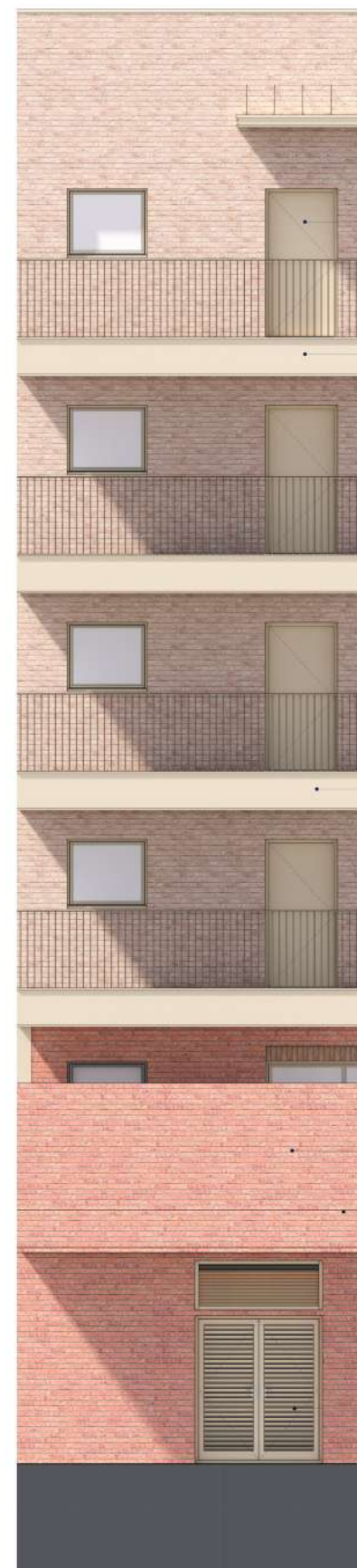
Bay Study - Elevation 05



Materials



Elevation



Muted Gold Framed
Windows/Doors

Muted Gold Access
Gallery

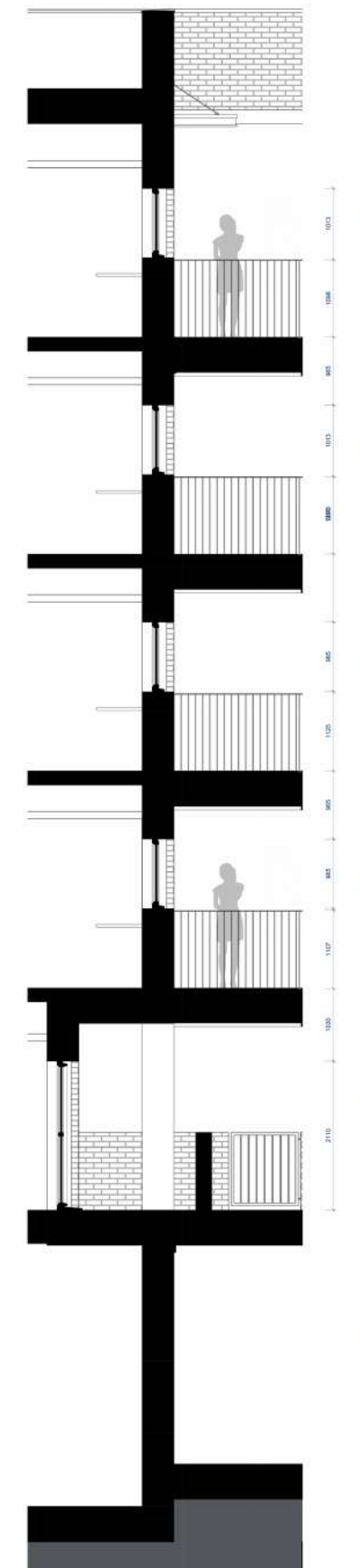
Muted Gold Access
Gallery

Dark Red Brick

Dark Red Brick Banding
with Projecting Course

Muted Gold Louvre Door

Corstorphine & Wright



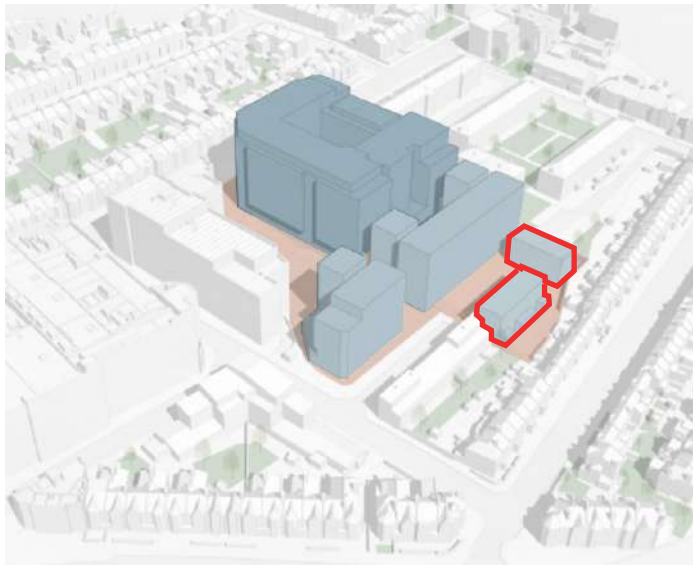
Section

7.19 Proposed Elevations



7.20 Building D Contemporary Precedents

ROOF FORMS



Bell Philips, Sutton

RHYTHM



Malieklos, Rotterdam

SCALE



Allford Hall Monaghan Morris, Grand Union

HISTORIC ADAPTATION



Blenheim Terrace Moldur Studio

QUALITY



Gerontopsychiatric Center, Großschweidnitz Kleihus

ORNAMENTATION



Lee-Marley-St-Johns

DIVERSITY

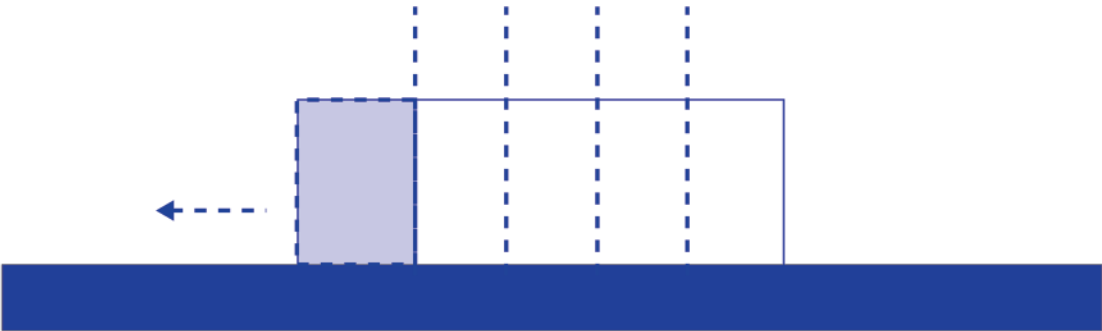


Marvic House, London

7.21 Building D Development

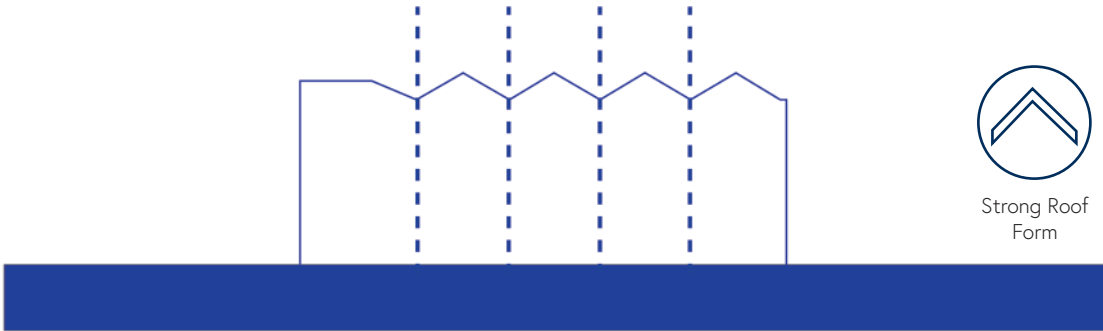
01

Pure Form



02

Contextual Roof Form



03

Vertical Rhythm



04

Rhythm Variation



05

Highlighting Bays



06

Contextual Ornamentation







7.23 Contextual Reference



Pitched roofs and ornamentation



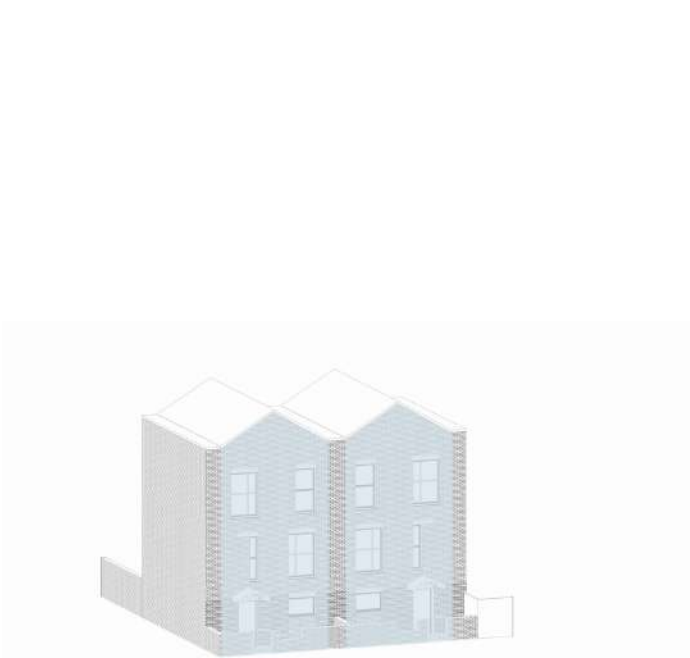
Window headers



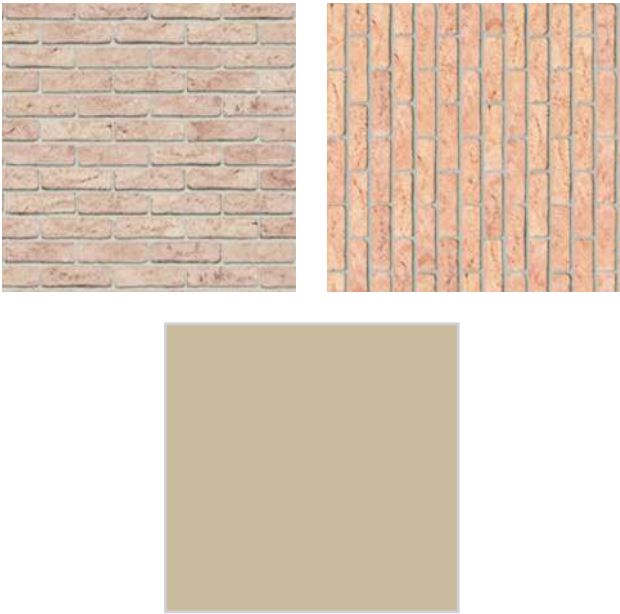
Entrances grouped and expressed

7.24 Bay Studies

Bay Study - Elevation 01



Materials



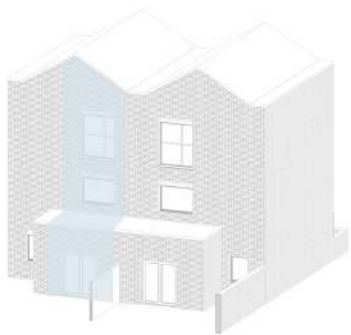
Elevation



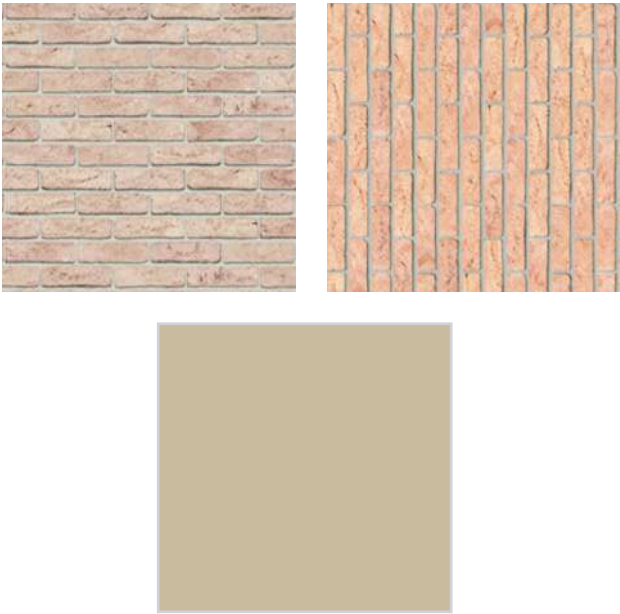
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7.24 Bay Studies

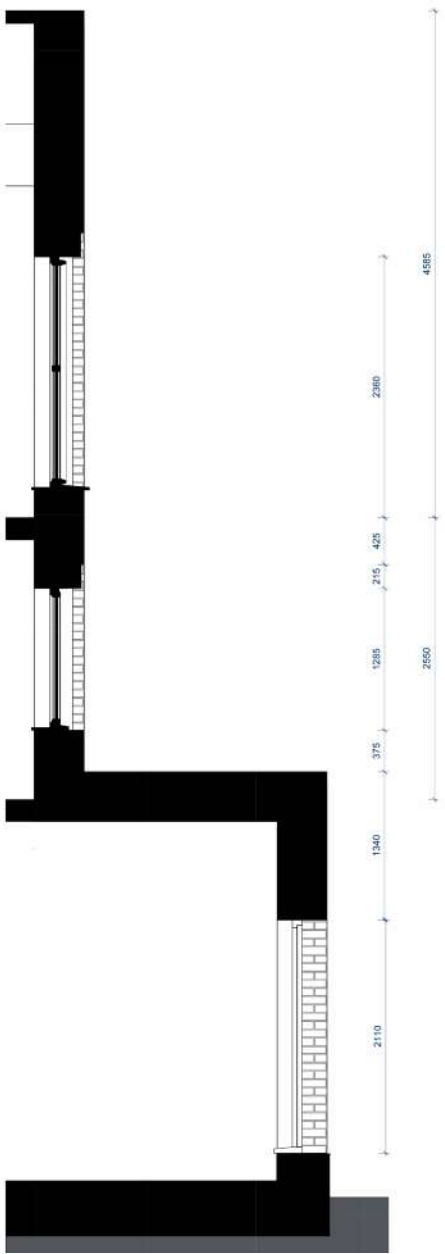
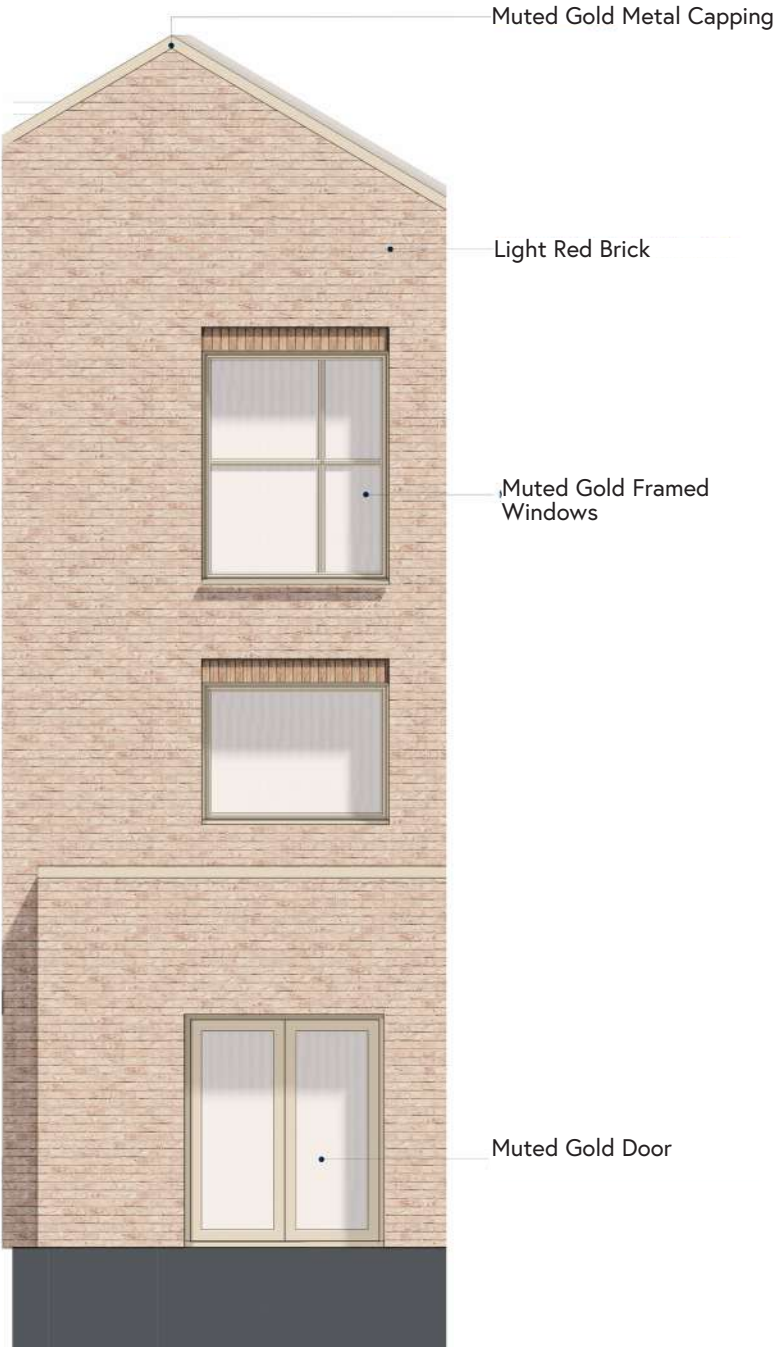
Bay Study - Elevation 02



Materials



Elevation



Section

7.25 Proposed Elevations



8.0

Landscape

8.0 Landscape

Corstorphine & Wright

8.1 Overview

Given the urban context of the site, importance was given to ensure high quality, multi-use and well lit outdoor amenity was provided to cater to the new student and residential community alongside the local public.

At the heart of this ethos lies the public open space, harmoniously stitching together the proposed built forms whilst providing opportunities for play, socialising and increased bio-diversity. Careful coordination between the massing and internal layouts with the landscape design has incorporated key passive safety measures, including ensuring clear lines of sight through the spaces, and natural surveillance and overlooking from all sides

A key aspiration for Building A was to visually link the public open space to the private student courtyard on level 01. This has been achieved through a sunken courtyard, providing an alternative type of outdoor space.

The level 01 courtyards to Building B and C provide a sheltered and secure outdoor space, for use by the residents of the respective buildings. These communal spaces allow for larger gathering whilst also providing space for kids to play.

Across the entire development roof tops have been optimised to provide a range of biodiverse roof finishes ranging from bio solar to wildflower gardens.

For further details on the landscape design and development please refer to the Landscape Design & Access statement submitted alongside this application.



9.0

Access &
Maintenance

9.0 Access & Maintenance

9.1 Inclusive Design

An Inclusive Approach to Design

A key component in developing an inclusive approach to design is seeking to change the built environment so that it responds to the needs of all users; removing any barriers to full participation and ensuring all spaces can be used safely, easily and with dignity by all. Developments should be convenient to use and welcoming without disabling barriers, so everyone can use them independently without the need for special requirements, treatment or excessive effort.

The proposed development has employed an inclusive design approach from the outside, aspiring to be:

- Welcoming with no disabling barriers that might exclude people
- Inclusive so everyone can use it safely and easily
- Legible to ensure ease of movement and wayfinding
- Convenient; so everyone can use it without too much effort or separation
- Adaptable to respond to changing needs and flexible so different people can use it in different ways.

In the development of the design, the following legislation, standards and guidance have been draw upon:

- National Planning Policy Framework Approved Document Part M
- British Standard 8300
- Code of Practice for Design of Buildings and their Approaches to meet the needs of Disabled People
- British Standard 9999; Code of practice for fire safety in the design, management and use of buildings
- Department for Transport (DfT) (2005), Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure
- Inclusive Streets: Design principles for blind and partially sighted people; and Street Character toolkit, Royal National Institute of Blind People (RNIB)

Where it has been reasonable and necessary to do so we have adhered to these standards which are regarded as a minimum standard, whilst where appropriate, opportunities to exceed have been explored.

Summary of Access Provisions

Below is a summary of access provisions and considerations included within the scheme:

- **Transport:** Scheme in close proximity to public transport with easy and accessible links.
- **Cycle Facilities:** Secure internal storage is provided as well as a number of Sheffield stands within the public realm.
- **Entrances:** Main entrance relates to surrounding context and is clearly visible from street, as identified in building design.
- **Circulation:** Vertical circulation provided in all cores. Step free routes at each level from Ground Floor to bedrooms and external areas.
- **Means of Escape:** Internal escape routes suitable for independent escape by all users.
- **Social Spaces:** Designed to be fully compliant with Approved Document Part M with all areas easily accessible to users without the need for support.

Public Realm

Given the gradient of the existing site and adjacent roads, the main entrance has been located at an easily accessible point at the centre of the site with gradient not exceeding 1:21 therefore not classed as a ramp. The corner of Lordship Lane and the public green space is the highest point of the site, making the transition to the south, where the residential elements sit. Creating separate buildings has allowed for level access to all front doors the

Entrances and Receptions

The Main Entrance and Reception Spaces have been design in line with Part M to include:

- Manifestation to glazed screens and doors
- Entrance doors with minimum clear opening of 1m

- Out of hours intercom set at wheelchair height.
- External and internal lighting will offer transition between spaces to avoid disparity in visibility.
- Internal finishes will avoid highly reflective surfaces and provide appropriate slip resistance.
- Reception desk will have dropped section for wheelchair users and be in full view of the entrance doors, to ensure visitors are easily visible and staff can provide assistance as required.

Vertical Circulation

Located beside the main reception is the large open plan social space, designed to be accessible to all. Lift access is provided up to the additional amenity areas at First Floor level via a transitional staircase and the central core. All furnishings and fittings throughout the spaces shall be Part M compliant.

The configuration of lifts and staircases provides a consistent layout at all levels. Ground Floor provides street access to the PBSA element of the scheme and the First Floor Amenity level provides access to all cores within the scheme. This will ensure residents and visitors can navigate the building successfully and simply. The main core has two lifts with one serving as a fire fighting lift. All lifts will comply with Part M with suitable dimensions and facilities for those with sensory disabilities. Entrance thresholds to all lift and stair cores are designed as level access without the need for steps or ramps.

Horizontal Circulation

The buildings floor levels are logically arranged to provide easy visibility of circulation cores. Natural light and ventilation also contribute to an environment that shall be easily understood and pleasant to navigate.

All Lobbies provide turning circles of 1500mm wide, with any doors opening onto corridors being recessed. All additional circulation areas shall be Part M compliant.

Décor will ensure walls, floors and doors are easily distinguished and highly reflective surfaces will be avoided to provide clear and comfortable wayfinding.

Accessible Room Provision

All PBSA bedrooms have been designed to comply with Part M requirements, with 5% (27 bedrooms) of the total provision being designated as fully accessible from the outset and a further 5% ready to be adapted. In line with the London Plan all residential homes will be designed to Part M4(2) with 10% of the total number of homes being designed to Part M4(3) as fully accessible from the outset.

Cycle Parking

Secure internal secure storage for bicycles has been designed in line with the Cambridge Cycle Parking Guide, providing an allocation of 182 spaces. These are accessed from the building entrance at Ground Floor which will be fitted access control systems to ensure entry by residents only.

Fusion Students also offer a bike rental scheme, enabling residents to have accessed to full maintained and serviced bikes throughout the year. All users will be inducted and trained ahead of usage.

There are a further 27 Sheffield hoops within the surrounding public realm.

Emergency Escape

The fire strategy for the building is developed to ensure the safe escape of people, including those with disabilities. Vertical escape will be by either the fire fighting lift or stairs. A full Fire Strategy and plan will be prepared by a specialist consultant, as well as further consideration being given to the following:

- An escape procedure that includes the best practice in respect of evacuating disabled people
- Safe areas of refuge to be provided at all levels accessible by wheelchair users, with communication facilities to enable contact with the fire controlling authority in line with BS9991.
- Management strategy to include training of staff to assist in the safe evacuation of disabled people

9.2 Access & Servicing Strategy

Town Centre Space

The Town Centre Space fronts onto Lordship Lane allowing ease of access and wayfinding as visitors approach from Wood Green Town Centre.

Primary access can occur at three points of the Town Centre Space allowing for potential sub-division of the space in the future. All access points allow for a level threshold ensuring accessibility and inclusion for all.

Servicing for deliveries and maintenance for this space can be undertaken via Lordship Lane. The Transport Consultant has assessed traffic and tracking to ensure no negative impact to other road users is incurred.

PBSA

The primary access to the PBSA consists of a single entry point located on the western elevation facing the public green space. This entrance will be manned by a 24/7 management team.

The Management team will consist of a Residence Manager who will be supported by a full team consisting of an Assistant Residence Manager a Community Manager an Administrator, a Front of House Supervisor as well as 2 on-site maintenance operatives and a fully out sourced housekeeping team. The site will have a 24-hour site presence which out of hours will be covered by our Customer Service Assistant team and the on-site Security Concierges.

The team will have been comprehensively trained on how to deal with fire management and major incidents and will be able to escalate a situation to a member of the senior management team if necessary, providing around the clock management. As such, there will be a member of on site at all times offering a point of contact for both students and local residents if required.

All entrances to the building will have a secure access point and will also be covered by CCTV. Contact details for the management team will be displayed across the building should local residents or tenants wish to speak with a member of staff.

Further security is provided by way of strategically placed CCTV cameras that enable the management and security team to monitor the building and entrance areas remotely

via CCTV imaging. These images will be able to be stored should they be required.

The office will be manned 24 hours with all tenants having access to the on site teams.

Housekeeping & Servicing

The housekeeping team will be responsible to maintain the regular and periodic cleaning of all common area including the common room laundry room, reception, walkways and waste disposal areas and lifts.

Students, as part of the living-away-from-home experience, will be responsible for the cleaning of their own rooms and shared kitchens. An offer for a tailor-made housekeeping room service will be offered to all tenants for a fee.

Residential - Building B & C

Communal access to building B and C is via dedicated communal entrances leading into a secure lobby. These spaces will be secured via with access only provided to the resident of each respective core. Visitor access will be managed through video call system.

Private ground floor maisonettes will have their primary access off-street via level threshold front doors. To allow for step free access to the upper floor, additional secure access has been provided via the podium courtyard, accessible via the lift core.

Servicing of plant spaces have dedicated independent access point to ensure the safety and wellbeing of the residents.

Residential - Building D

The town houses of Building D are accessed via secure private front doors facing the public realm.

The fence separation between each garden will be 1800mm tall whilst being easily removable to allow access and servicing to the culverted water course.

Access Strategy



- Key:**
- ↔ Access Vehicle Route
 - Traffic Control/Restriction (drop down bollard)

9.3 Waste Strategy

Town Centre Space

It is intended that waste from the Town Centre Space will be stored within the tenant own demise. Potential for ventilation of this space has been provided whilst the collection of waste can be undertaken via Lordship Lane or through the access route.

Collections will be made by a private contractor to suite the needs of any respective tenant.

PBSA

The Refuse Store will have notices/signage to give guidance on recycling procedure, and residents will be briefed as part of their induction with regard to waste management and the correct protocols. The space is designed to be secure and constructed of robust materials with suitable drainage and taps to allow regular wash downs and cleaning of bins.

Refuse and recycling will be collected from the residential accommodation by the Building Management team where it will be brought to the dedicated Refuse Store room at Ground Floor. This space has been designed to accommodate an adequate number of 1100 litre Eurobin storage containers for the proposed number of rooms/residents.

Servicing and refuse collections will be made from the West of the building, with bins taken out via the servicing corridor to the collection point.

The provision of waste storage for the PBSA element has been calculated in accordance with BS5906:2005:

Total Number of Bedrooms: 623
Waste provision per Bedroom: 70 Litres
Total Waste Storage Requirement: 43,610 Litres
Total Number of 1100 Litre Eurobins required: 40

Current Scheme Provision: 21no. 1100 Litre Eurobins, based on 2no. private refuse collections per week, further consideration of events, Bank Holidays etc, will be outlined with the appropriate contractor.

Residential - Building B & C

Each residential core and entrance is closely located to a independent refuse store to minimise the travel distance between the home and store. Each store will be accessed externally to prevent odours within the communal spaces and ensure protection from fire.

The Refuse Store will have notices/signage to give guidance on recycling procedure, and residents will be briefed as part of their induction with regard to waste management and the correct protocols. The space is designed to be secure and constructed of robust materials with suitable drainage and taps to allow regular wash downs and cleaning of bins.

Waste collection will be undertaken by the boroughs chosen contractor. The location of the refuse stores will allow for the collection vehicle to park and collect waste bind within 10m from the store entrance.

The provision of waste storage has been calculated in accordance with Haringey Local Plan, Sustainable Design & Construction (adopted 2013).

Residential - Building D

Each town house will has been provided space within their front gardens to allow for a 360l waste and 360l recycling bin. Residents will bring their bins out on collection day in similar fashion to the existing homes on Wellesley Road.

The provision of waste storage has been calculated in accordance with Haringey Local Plan, Sustainable Design & Construction (adopted 2013).

Refuse Strategy



Key:

- | | | | |
|------|------------------------------|------|----------------------------------|
| ---> | Residential Collection Route | ---> | Town Centre Use Collection Route |
| ■ | Residential Refuse Store | ■ | Refuse Store |
| ---> | PBSA Collection Route | ↔ | Refuse Vehicle Route |
| ■ | PBSA Refuse Store | | |

9.4 Maintenance Strategy

Maintenance Activities

A Facade Access and Maintenance Strategy will be developed during the detailed design phase of the project and will provide access strategies for the following activities:

- Cleaning of glazing
- Cleaning of other materials
- Glazing replacement
- Infrequent Inspection
- Maintenance Activities

There is also considered direct maintenance access to all plant and roof areas from within the building to allow for inspection without the need acquire additional access machinery.

Material Selection

The main material utilised across the façades is brickwork and this will need to be inspected once a year and cleaned every three to four years by high-pressure hose.

A further A1 rated cladding material proposed will be inspected and cleaned once a year.

Windows to Building A will be cleaned every three to six months at a suitable time of day and with prior warning to residents. Buildings B, C and D will provide potential to allow safe cleaning of all windows by residents internally.

Residential Building Access and Maintenance

In developing the access strategy, consideration shall be given to the impact of maintenance activities on residents. In particular, access requirements to residential accommodation and transport of glass if internally replaced. Where possible building maintenance will be undertaken during off-peak times.

Access Strategy

Abseiling access will be provided for façade maintenance to Building A eastern and courtyard elevations. Alternative external climbing tools (cherry picker) will be used for all other facades of the development which will be guided by a carefully considered and detailed maintenance and access strategy which will be set out in conjunction with a consulting Construction Design Manager (CDM).

Plant Maintenance Strategy

Plant areas have been carefully located to provide appropriate servicing to both Town Centre Use, PBSA and Residential elements of the scheme independently. They are positioned on the ground floors of each building for safe and easy access.

Plant Maintenance Strategy



Key:

- ↔ Vehicular Access Route
- Access Route
- Plant Rooms

9.5 Cycle and Vehicle Parking Strategy

Cycle Parking

Each use and building will have their own dedicated cycle store providing a variety of options to cater to different cycle uses.

Town Centre Space

It is envisioned that long-stay cycle parking will be provided within the tenant demise to reflect the need and requirements.

Visitor cycle parking will be provided as Sheffield stands within the public realm.

PBSA

A central, secure and sheltered cycle store is provide with two tier double stack stands alongside a number of Sheffield stands for larger bikes or for those who maybe unable to utilise the two tier stack.

Cycle parking provision has been provided as 0.75 per bed space in accordance with the London Plan.

Visitor cycle parking will be provided as Sheffield stands within the public realm.

Residential

Each core is provided with a dedicated cycle store consisting of two tier cycle racks alongside Sheffield stands for larger bikes or for those who maybe unable to utilise the two tier stack.

Building D cycle parking will be located in close proximity within Building C, core C2 cycle store to ensure upmost security.

Cycle provision has been provided in accordance with the London Plan as below.

1.5 spaces per 1 bedroom dwellings

2 spaces per 2+ bedroom dwellings

Visitor cycle parking will be provided as Sheffield stands within the public realm.

Car Parking

Given the proximity to Wood Green underground Station alongside the various other public transport connections this scheme looks to prioritise sustainable modes of transport over car usage. As such only DDA compliant Blue Badge parking will be provided.

Town Centre Space

In accordance with the London Plan 1no. Blue Badge car parking space will be allocated to the Town Centre Space.

PBSA

In accordance with the London Plan 1no. Blue Badge car parking space will be allocated to the PBSA element of the scheme. This space will not be provided to future students, instead will cater to staff.

Residential

In accordance with the London Plan the scheme looks to ensure blue badge car parking spaces with a quantum of 10% of the number of residential homes (8 spaces)

From the outset a minimum of 3% of car parking spaces allocated to the residential element will be incorporated with the remaining 7% able to be implemented as demand requires.



Key:

	Cycle & Vehicle Routes		Service Vehicle Routes		'Future Proofed' Parking Spaces
	Cycle Store Route		WCH PBSA Staff Parking Space		Traffic Control/Restriction (drop down bollard)
	Cycle Stores		WCH Town Centre Space		
			WCH Parking Spaces		

10.0

Sustainability

10.0 Sustainability

10.1 Key Targets

BREEAM



BREEAM assessment will be undertaken for the PBSA, with the target of achieving a BREEAM "Excellent" rating as a minimum and aspiration for BREEAM "Outstanding".

Aspiration for the traditional residential dwellings to be assessed against the Home Quality Mark (HQM) standard.

Health & Wellbeing



The development provides significant amenity space and promotes walking and cycling to encourage healthier, more sustainable living.

Daylighting, ventilation, accessibility and adaptability are also being reviewed to ensure the development proposals provide a healthier environment.

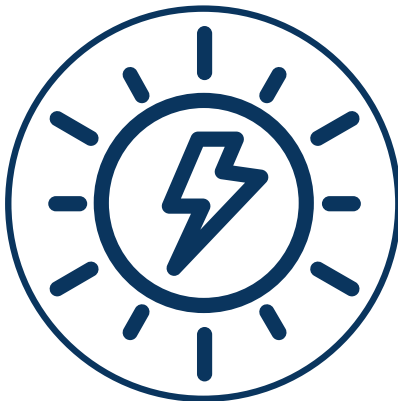
Materials



Opportunities to reduce embodied carbon will be discussed throughout the design process, maximising material re-use and specification of low carbon materials.

The materials strategy for the development shall consider lifecycle environmental impacts, with a view to optimising materials utilisation and safeguarding natural resources. A whole life-cycle carbon assessment will be undertaken.

Energy



Carbon savings will be assessed, and a significant reduction is anticipated at both the Be Lean and Be Green stages. Furthermore, by prioritising electricity over fossil fuel consumption, the scheme is future-proofed to take advantage of a decarbonising national grid.

Climate Change Adaptation



The future climate is expected to be warmer with variations to the timing and intensity of rainfall. To ensure that the building continues to perform throughout its lifespan, the design will be assessed against CIBSE TM52:2013 The Limits of Thermal Comfort: Avoiding Overheating in European Buildings and CIBSE TM59:2017 Design methodology for the assessment of overheating risk in homes. Climate change scenarios will also be incorporated into the assessment of flood risk.

Waste & Recycling



Circular economy principles will be adopted in the design, with aspiration to divert over 95% of waste material from landfill during demolition, excavation and construction. Circular economy will be considered throughout the design process, including assessment using One Click LCA software.

The operational waste strategy comprises provision of dedicated space of adequate size and in convenient locations for storage of general refuse, recyclables and food waste.

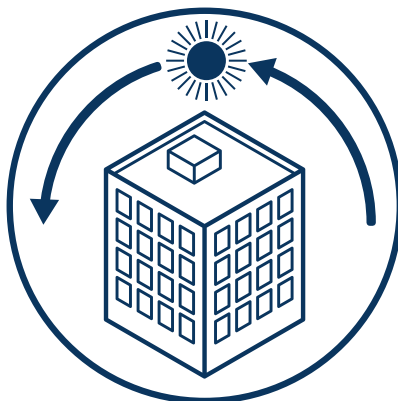
Water & Drainage



Water efficient/low flow sanitary fittings will be specified to reduce potable water consumption and foul flow.

Drainage systems and wastewater discharge shall be designed in line with best practice guidance, to eliminate any pollution risks for watercourses and underground water

Building Form & Passive Measures



Passive design measures have been considered to minimise excessive external wall to floor ratios and maximise dual/triple aspect dwellings. Elevation design and fenestration will look to minimise excessive solar gains before considering mechanical methods.

10.2 Sustainable Construction Statement

Low environmental impact is central to the design of the proposed development. To benchmark this process, the Building Research Establishment's BREEAM methodology has been used. The development will be registered and assessed against New Construction 2018. The scheme considers the broad environmental concerns of climate change, pollution, impact on occupants and the wider community. They balance these with the need for a high quality, safe and healthy internal environment. These standards go beyond the requirements of the Building Regulations. The project will look to achieve a minimum of a BREEAM New Construction 2018 (Multi-residential) 'Excellent' rating with 'Outstanding' as the aspiration. In support of the planning application an initial BREEAM pre-assessment has been carried out. The following sustainability initiatives are being considered as part the of development.

Materials

Building and construction activities worldwide consume 3 billion tonnes of raw material each year, which account for approximately 50% of total global consumption. Using sustainable building materials and products promotes conservation of dwindling non-renewable resources. In addition, integrating sustainable building materials into building projects can help reduce the environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these source materials.

Environmental Impact of Materials –Life Cycle Assessment (LCA)

The use of construction materials leads to a wide range of environmental and social impacts across the life cycle through procurement, wastage, maintenance and replacement. In order to reduce the environmental impacts of materials, a building Life Cycle Assessment (LCA) appraisal will be carried out with different superstructure design options. The LCA options appraisal will be integrated within the wider design decision-making process. The design option selected by the client to be progressed beyond Concept Design with the reasons for and reasons for not selecting the other design options.

Sustainable Timber

All the timber and timber-based products used on the project shall be 'Legal' and 'Sustainable' as per the UK Government's Timber Procurement Policy (TPP). All timber used for basic or finishing building elements in the scheme will be sourced from responsibly managed and sustainable forests or plantations. Such timber products are the only truly renewable construction material in common use and

the responsible management of forests for timber helps to lock in CO2. By maximising the use of timber for structural or finishing purposes the embodied carbon impact of the development can be reduced.

Locally Sourced Materials

A building that is truly sustainable must be constructed using locally sourced, sustainable materials i.e. materials that can be supplied without any adverse effect on the environment. Therefore, where practical, materials should be sourced from local suppliers, reducing the environment impacts and CO2 emissions associated with transportation to the site.

Recycled Materials

Scope for increased recycling will be incorporated by specifying recycled materials where possible and ensuring that even where new materials are used, as much as possible can be recycled at the end of the building's life.

Specifying materials with a high-recycled content is also another method of saving processing or manufacturing energy. The recycled content of a material can be described as either post-consumer or post-industrial to indicate at what point in the life cycle a material is reclaimed.

Water Conservation

Water consumption in the UK has risen by 70% over the last 30 years. Trying to meet the increasing demand by locating new sources of water supply is both expensive and damaging to the environment. Therefore, the design team will focus on reducing the demand for water and managing the existing resources.

Water Demand Reduction and Water Efficiency

To meet water efficiency targets the following water saving measures are being considered for a range of areas in line with the BREEAM requirements:

Dual Flush Cisterns on WC's - These units have the ability to provide a single flush of 4L and/or a dual flush of 6/3 L with an effective flush volume of 3.75 Litres. It is proposed that these are used throughout the development in order to minimise water consumption.

Flow Restrictors to Taps - Flow restrictors reduce the volume of water discharging from the tap. Maximum 5 Litres/min is recommended on the taps. Spray taps have a similar effect and are recommended to reduce both hot and cold-water consumption. Low flow taps in one of the above forms will be installed in all of areas so as to comply with the BREEAM mandatory requirements.

Low Flow Showers - The average shower uses 15 litres of water a minute, by restricting the output of the showers in the development to a maximum of 9 litres/ min a 40% water saving can be achieved. Flow rate can be reduced down to 8litres/ minute without compromising on water pressure and hence will be considered as the design develops.

Water Meters - In 1995 approximately 33,200 million litres of water a day were extracted in England and Wales, this increased to 44,130 million litres/day in 2001, and much of this was for domestic water supply. To reduce this figure, accurate information on usage is required for management of a building's consumption. Water meters will be specified on the main supply and sub-metering in line with the BREEAM requirements. Metering will look to include features such as smart metering that can improve user ability to manage consumption.

Sustainable Urban Drainage

The site's drainage strategy will aim to reduce the impact of development on the natural drainage patterns, by retaining water on site through the incorporation of Sustainable Urban Drainage systems (SUDs).

Despite the relatively low risk of the site, measures such as blue roofs and permeable paving will be considered to further improve surface water attenuation and mitigation of flooding impacts. A bespoke Sustainable Urban Drainage Systems (SuDS) Assessment has been developed for the development IDOM which provides greater detail of the drainage design.

Waste Management

Buildings and building sites produce a significant amount of waste per year. Most of the waste produced in the UK is disposed of in landfill sites and only a small percentage of it is recycled or reused.

Waste Targets

Under EU legislation the UK will have to ensure that less than a third of its waste is sent for burial in landfill sites by 2020 and the figure at present is about 80%. To achieve this target several measures are implemented, including landfill tax, aiming to discourage disposal of waste to landfill. Good waste management is a key component of sustainable development and is an important means of:

- Reducing unnecessary expenditure.
- Reducing the amount of natural resources for production of new materials.

- Reducing energy for waste disposal.
- Reducing levels of contamination and pollution arising from waste disposal.

Construction Waste

During the construction phase a large amount of waste material will be generated through construction and land clearing procedures. In building construction, the primary waste products in descending percentages are wood, asphalt/concrete/masonry, drywall, roofing, metals, and paper products.

Prior to commencement on site a Resource Management Plan (RMP) that complies with the requirements of current legislation and BREEAM will be prepared. This plan will identify the local waste haulers and recyclers, determine the local salvage material market, identify and clearly label site spaces for various waste material storage and require a reporting system that will quantify the results and set targets. As a minimum, the RMP will contain:

1. A target benchmark for resource efficiency, i.e. m³ of waste per 100m² or tonnes of waste per 100m².
2. Procedures and commitments to minimise non-hazardous waste in line with the target benchmark.
3. Procedures to minimise hazardous waste.
4. A waste-minimisation target and details of waste minimisation actions to be undertaken.
5. Procedures to estimate, monitor, measures and report on hazardous and non-hazardous site waste and demolition waste, where relevant, arising from work carried out by the principal contractor and all subcontractors. Waste data obtained from licensed external waste contractors needs to be reliable and verifiable, e.g. using data from EA/SEPA/EA waste return forms or a PAS402 compliant company.
6. Monthly reporting of all construction waste data throughout the project checked against expectations based on the stage of the project, invoices, etc., to validate completeness of waste reporting data.
7. Procedures to sort, reuse and recycle construction waste into defined waste groups, either on site or through a licensed external contractor.

10.2 Sustainable Construction Statement

Waste Management and Reporting in Operation

The detailed design phases will identify the potential waste streams that the development will produce. As a minimum, plans will be formulated to handle the separation, collection, and storage of common recyclable materials such as paper, glass, plastics, and metals. The collection points will be easily accessible to all of the users.

The main aim will be to recycle as much waste as possible, this will be achieved by making sure that waste recycling facilities are strategically placed in convenient locations.

Dedicated storage space for recyclable materials generated by the site during occupation, will include the following:

- Be clearly labelled to assist with segregation, storage and collection of the recyclable waste streams
- Be placed within accessible reach to building occupants or facilities operators for the deposit of materials and collections by waste management contractors
- Of a capacity appropriate to the building type, size, number of units (if relevant) and predicted volumes of waste that will arise from daily or weekly operational activities and occupancy rates.

Waste collection points – at key ground floor location there will be waste recycling collection points, which will be emptied on a regular basis. The split recycling streams will then be directed to an accessible refuse area, where the separate streams can be stored until collected by the local council.

A waste management strategy for the development will be developed based on local Council guidance, with the aim of supporting recycling of as much waste as possible. These facilities will be easily accessible to all users and sized according with BREEAM guidance.

Construction Environmental Management

Construction sites are responsible for significant impacts, especially at a local level. These arise from noise, potential sources of pollution, waste and other disturbances. Impacts such as increased energy and water use are also significant. Therefore, attention is being given to site-related parameters with the aim to protect and enhance the existing site & its ecology.

The aim is to have a construction site managed in an environmentally sound manner in terms of resource use, storage, waste management, pollution and good neighbourliness.

Considerate Construction Scheme

The principal contractor should report and monitor on the following items to achieve one credit for responsible construction management:

Vehicle movement

- Manage the construction site entrance to minimise the impacts (e.g. safety, disruption) arising from vehicles approaching and leaving the development footprint.

Pollution management

- Minimise the risks of air, land and water pollution.

Tidiness

- Practices ensure the development is safe, clean and organised at all times. This includes, but is not limited to, facilities, materials and waste storage.
- Ensure clear and safe access to the site at the point of handover.

Health and wellbeing

- Provide processes and equipment required to respond to medical emergencies.
- Establish management practices and facilities encouraging equality, fair treatment and respect of all site operatives.

Security processes

- Ensure training is ongoing, and up to date, for personnel and visitors.
- The principal contractor ensures that site operatives are trained for the tasks they are undertaking (including any site-specific considerations).
- All visitor, workforce and community accidents, incidents and near misses are recorded, and action is taken to reduce the likelihood of them reoccurring.

Flexibility and adaptability of the development to future occupiers' requirements

The construction will offer inherent future flexibility, to ensure that over time the building can adapt to changing occupier needs, and also support potential changes of use. A number of factors contribute to this flexibility;

- Internal partition walls are predominantly non-load bearing to allow adaptation/removal
- Bathroom facilities to bedrooms are sealed 'pods' to allow ease of replacement or removal
- Service zones are fully accessible and adaptable
- Building plan depth is limited to below 15 metres with daylighting available from both sides in most cases
- Fire escape principles are applicable to other residential typologies

The development would support conversion to other residential typologies with minimal disruption; co-living being the most obvious and emerging in city locations. The broad range of accommodation does not limit itself to undergraduate student occupation; post-graduate and young professionals would find the range of room types and facilities suitable, akin to managed apartment developments.

Biodiversity and the green infrastructure network

Steps have been taken in the design to enhance the biodiversity of the site, including a landscaped public realm ad podium courtyards featuring a number of plants/trees/shrubs. Please refer to the Landscape and Public Realm section of this document for further details. The current condition of the site features self-seeded greenery of low quality, and predominantly unkept car park that offers little to the biodiversity of the area. The managed landscaping that will accompany the development will improve this condition.

Orientation and Ventilation

The most sustainable orientation for the buildings has played an intrinsic role in the layout of the site. The four principle blocks of accommodation are orientated east-west, with only a limited amount of rooms facing north. Wherever possible, any north facing rooms are dual aspect.

Overheating and Cooling

The scheme has considered natural ventilation systems in order to reduce the energy and emissions associated with mechanical cooling and ventilation systems. However, the Lordship Lane site is located on a major arterial route into the Town Centre. The result of this is an area of excessive noise and poor air quality along Lordship Lane. As such it is not considered preferable to use natural ventilation in this northern part of the site, in particular bedrooms where sleep would be adversely affected.

Other areas of the development, such as communal living/kitchen spaces, where noise is not as significant an issue, and bedrooms to the eastern, souther western and all residential homes, will be naturally ventilated to reduce energy demands. Further investigation into other natural ventilation opportunities will be conducted during the following development stages. Openable windows will still be included for purge ventilation and can be used at the occupant's discretion.



10.3 Daylight & Sunlight Optimisation

Daylight and Sunlight plays a crucial role in the comfort and wellbeing of the students and residents of the scheme.

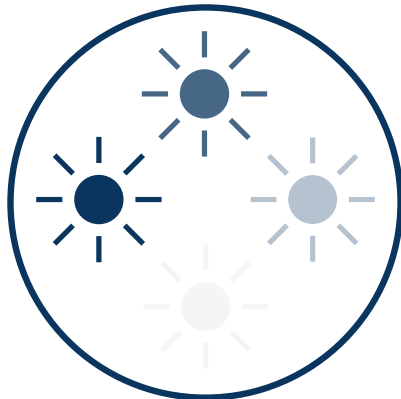
Through extensive coordination with the Daylight & Sunlight consultants the design team has looked at various methods to optimise daylight and sunlight to all homes, communal areas and outdoor amenity. This has been balanced to ensure the proposals do not impact the surrounding properties anymore so than the recent developments (Omnibus House) to the west of the site.

Internal daylight has been further optimised by careful setting out of rooms alongside considering lifestyle choices for example placing study desks closer to the windows and ensuring living spaces take priority over kitchens. These principles have been established following constant feedback and analysis from the Daylight & Sunlight consultants. For further details please refer to the Daylight & Sunlight Impact Assessment submitted as part of this application.

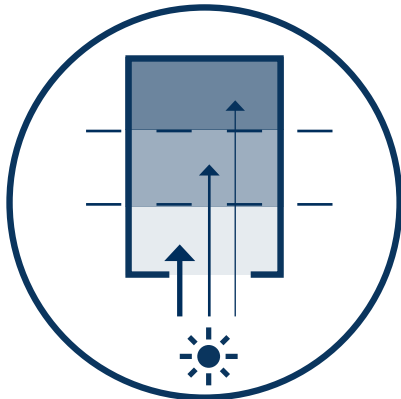
Given the urban context of the development where shortfalls in daylight and sunlight occur key steps have been taken to ensure this shortfall is minimised and alternative benefits are provided.



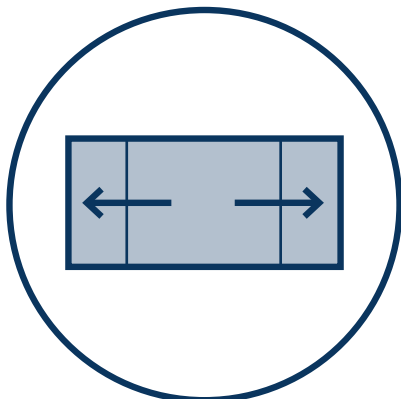
Ensure good daylight and sunlight levels to the primary public outdoor space



Provide a range of communal outdoor amenity with a variety of shaded and non-shaded spaces to cater to different seasons and personal preferences



Considered placement of key rooms and spaces such as living rooms and study desks to ensure optimum daylight to areas that require it the most in every day life. Equally placing rooms such as storage or bathrooms in areas that require less daylight and sunlight.



Window opening sizes are optimised to rooms and spaces that are expected to receive a limited amount of daylight, specifically inward facing courtyard rooms. This is balanced against other site conditions such as overheating and noise pollution.



Ensure rooms and homes that incurs a shortfall in daylight and sunlight levels have direct access to well lit communal and private amenity areas; balconies, terraces, gardens or courtyards.

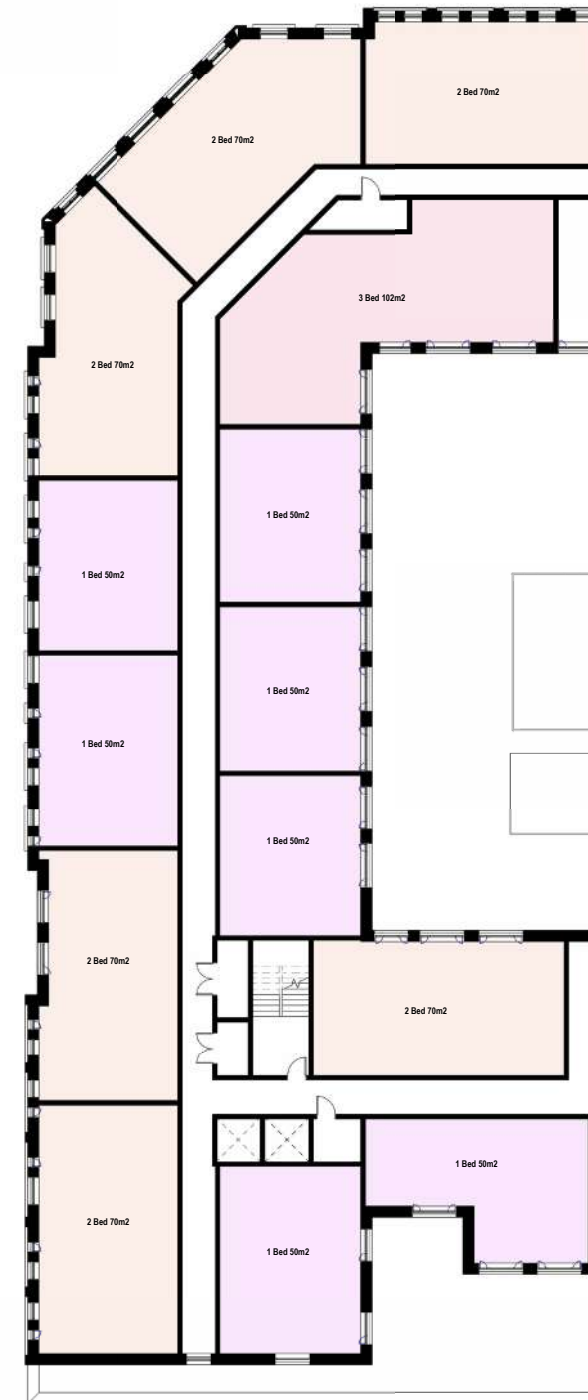
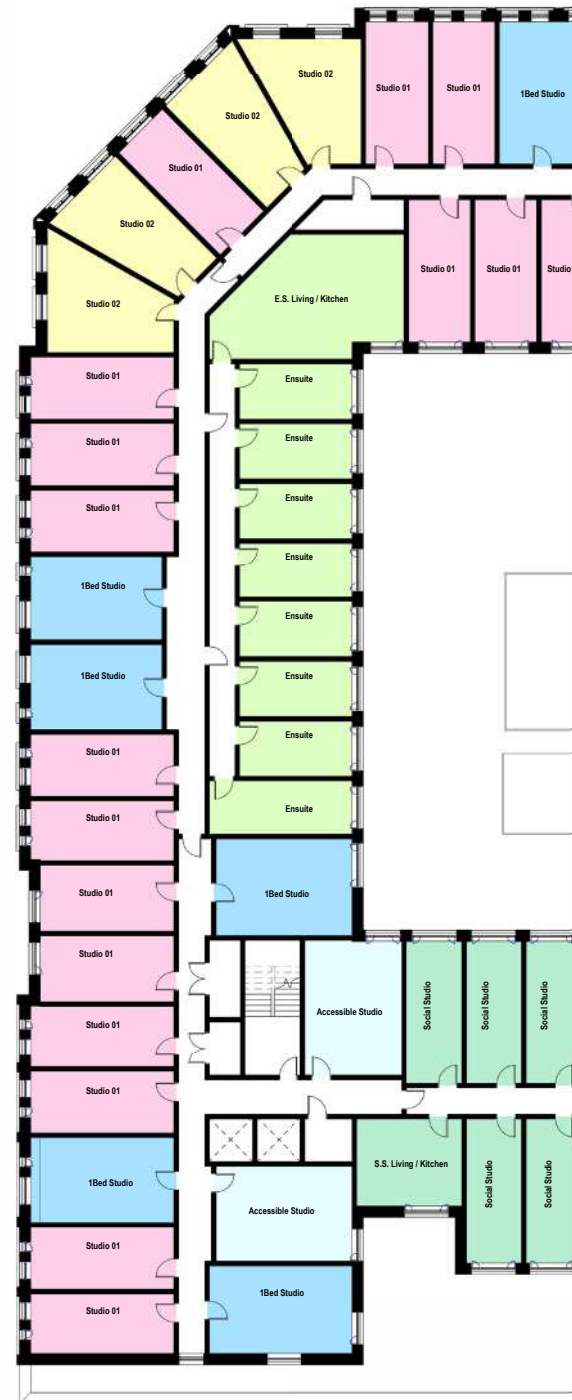
10.4 Adaptability - PBSA to Residential

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13.0

Conclusion

11.0 Conclusion

Corstorphine & Wright

11.1 Summary

Redevelopment of the site represents a significant regeneration opportunity and financial investment in the Wood Green Town Centre, which will form a key component in the city scape and provide a building on one of the most prominent sites in Wood Green.

The proposed buildings and landscape design are of the highest quality and standards as illustrated in this document resulting in a refined and well mannered development that will sit comfortably within the local area and make a positive contribution to the distinctive local character. This is a building development that has Wood Green past, present and future rooted within its design - A building about Wood Green, for Wood Green.

Redevelopment of the site will deliver the following key benefits:

- Regenerate a key town centre plot, optimising its development potential and whilst provide community wide benefits.
- Provide student accommodation and both internal and external amenity space.
- Introduce a scheme which benefits the surrounding areas whilst generating and supports existing employment and amenities
- Develop a strong focus on sustainability at all scales of the scheme and BREEAM guidance.
- Provide a proposal that is deliverable and responds to the site constraints
- Demonstrate a high-quality of design throughout all elements and scales of the scheme rooted in local context and heritage.
- Take a considered approach to accessibility and inclusivity to provide a development suited to all.
- Provide a positive contribution to the streetscape, creating attractive active frontages to the Lordship Lane and Wellesley Road and increasing active frontage and permeability of the ground plane where possible.
- Introduce an urban oasis of biodiveristy in the heart of Wood Green.

