



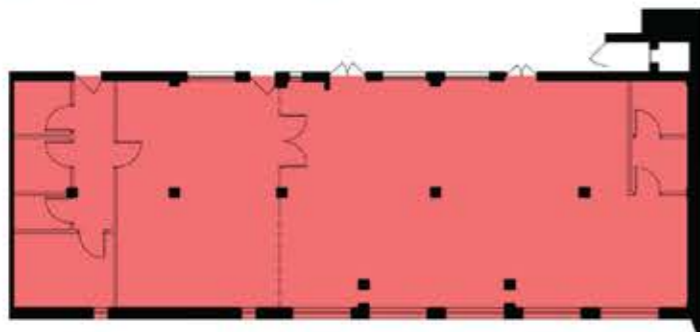
Photo showing the existing entrance to Falcon from the street. This will be replaced with a new brick and pre-cast stone portico with a inset lettering and a decorative treatment applied to the pre-cast stone panel. This will lead to a new secure entrance lobby.



The existing courtyard will be entirely re-landscaped with high quality surfaces and new planting.



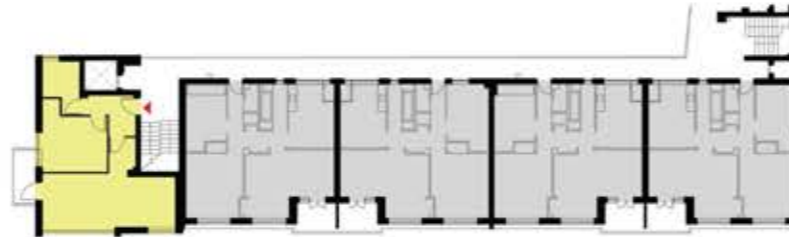
Access paths will be improved with new ramps providing wheelchair accessibility across the site.



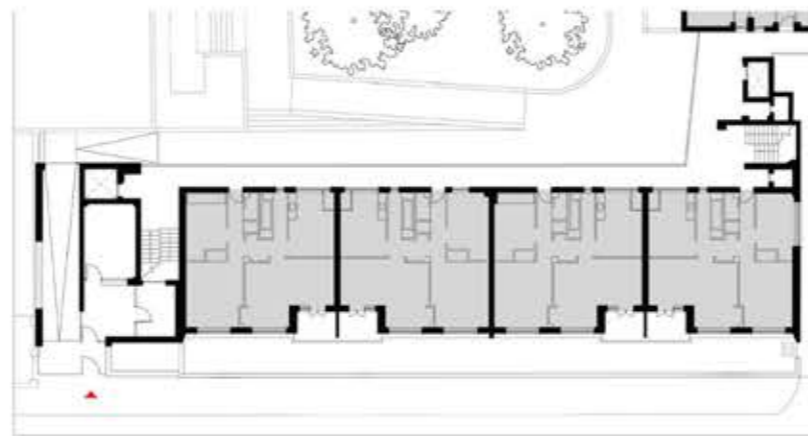
Extract of the basement plan showing the expansion of the TRA hall with potential to accommodate a flexible arrangement of separate spaces as required. Facilities will include kitchenettes, storage and washroom areas.



Roof plan



Typical upper floor plan



Ground floor plan



Basement plan

**UNIT SIZE KEY**

**KEY:**

- 1B2P FLAT
- 2B3P FLAT
- 2B4P FLAT
- 3B5P FLAT
- 2B4P HOUSE
- 3B6P HOUSE
- EXISTING UNITS
- TRA Hall

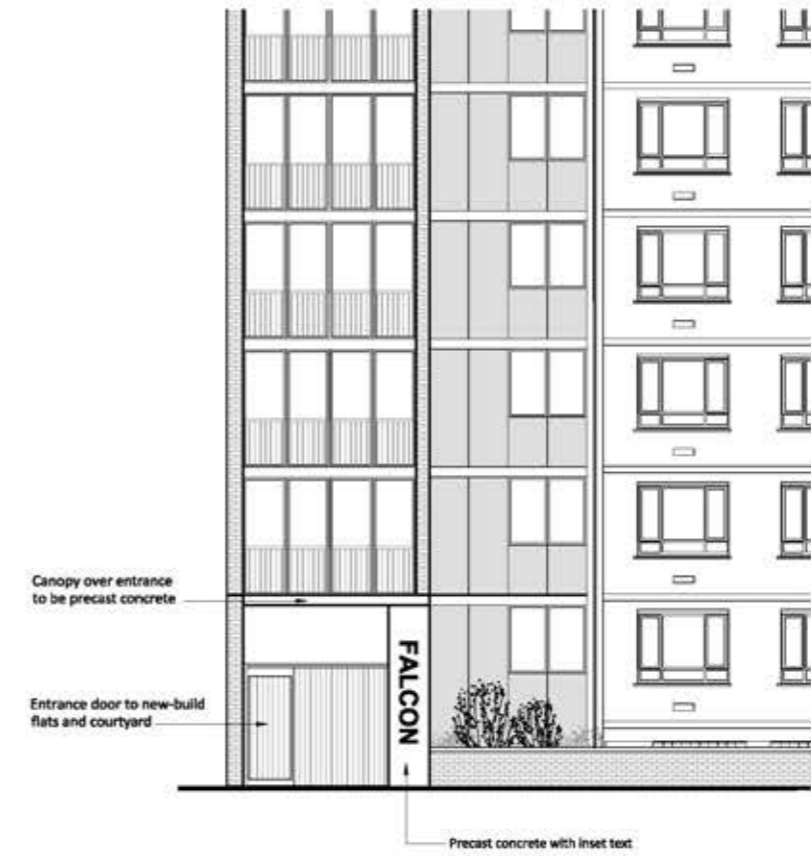


Plan of the typical side extension showing the location of rooms and windows. The only window facing the rear is a bathroom window which is not classified as a habitable room impacting on privacy. The plan shows the modest increase in size of the elevation at the rear in relation to the existing lift and stair core.





West elevation to Old Gloucester Street



Detail showing new entrance portico



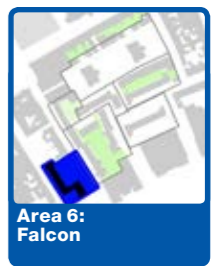
South elevation showing side view of extension



East rear elevation showing extension and changes to existing cladding



View of Falcon extension from Old Gloucester Street



### Falcon Courtyard

The estate regeneration will bring substantial improvements in the quality of this space in terms of planting, surfacing, finishes and accessibility. The use of the courtyard would change to meet the needs of a greater range of residents as discussed during consultation. Whilst the courtyard would still be suitable for children's play, it would be more appealing to adults and new soft areas would reduce noise reverberation.

1. The central part of courtyard would be a raised lawn with paths around. The grass could be cut short as a lawn or could be maintained as a meadow garden. The paths around and the arrangement of steps and walls create a playable space but discourage ball games (which are not allowed in the existing courtyard but played habitually).
2. Five flowering cherry trees would be planted in the central grass area to replace the existing three cherry trees, which are stunted and unhealthy.
3. The raised garden near the sub station is currently overgrown and inaccessible. The proposed raised levels in the central part of the courtyard will allow shorter steps to make this area more accessible. The existing vegetation would be pruned back and augmented with new planting to make a seating area overlooking the new space in the sunniest part of the courtyard. The existing high hawthorn hedge on the boundary wall with Bevan House would be retained and pruned to promote density and so privacy between the neighbouring spaces.
4. Terrace steps around the lawn make places to sit and a spill out area for the TRA facilities.
5. Climbing plants on the south side of the courtyard will bring vertical greenery to the space and cover the existing blank elevation.
6. The ground around the existing lime trees will remain at the same level and planted with groundcover, to provide a degree of privacy but not cut off the space from the street.
7. The existing low level access to the sub station will remain accessible via new steps.
8. New visitor cycle parking in secure area, near lift and stairwell.

### Boswell Street Frontage

9. There will be a new gate with shallow ramped wheelchair access from Boswell Street in addition to the existing ramped access from Old Gloucester Street. The new access will be in the form of shallow sloping paths around the raised lawn, arriving at the lower level near the central lift and stairs.
10. The existing mature lime trees will be retained. Tree surgery would be carried out to maintain the health of the trees and reduce shade if necessary.
11. The existing railings would be retained and repainted.
12. The existing sub station would be retained intact.
13. The existing small lawned garden fronting Boswell Street would be retained intact, possibly improved with residents' suggestions.
14. The terraced annex to the courtyard, fronting Boswell Street, would become three car parking spaces (Estate Parking Permit Spaces). There would be shrub planting and a path between the parking and the building.

### Old Gloucester Street Frontage

15. The Falcon front entrance yard on Old Gloucester Street would be retained with the same number of parking spaces (five Estate Parking Permit Spaces) but would be resurfaced and have tree planting where space allows.
16. New visitor cycle parking would be located at the front entrance.
17. The front boundary wall would be replaced with a new brick wall to hide the bin storage.
18. The existing hedge on the south boundary is retained.
19. The lower level narrow grass strip to the Old Gloucester Street frontage would be retained as existing.
20. The existing ramped access from Old Gloucester Street will be retained, although it does not comply with contemporary accessibility standards and will be augmented by the new fully accessible entrance from Boswell Street.
21. The existing children's play area and outdoor gym on Old Gloucester Street are not within the application area.





Area 6:  
Falcon

## 5.8 Materials & details strategy: Buildings

There is a rich diversity of building materials in the surrounding streets and neighbouring properties. Brick forms the predominant material, although in a variety of colours & textures. The existing estate buildings are characterised by horizontal concrete lintels with predominantly brick in-fills.

The proposals will balance the desire for a sense of architectural unity across the estate against the different urban design obligations of the proposed new elements. The intention is for the new buildings and extensions to read as a family of objects.

The design team has developed an approach using a consistent palette of brick as a primary material and a secondary material of anodised metal windows & panels. Finely detailed concrete elements are applied in subtly different ways according to the immediate context. Around Tybalds Close, the proposed new buildings are in direct conversation with the adjoining 18th and 19th century terraces. The new build structures, with deep reveals and generous areas of brick, are intended to exhibit the same solidity as their historic surroundings. The window dimensions as well as the storey and parapet heights of the new units reflect their existing neighbours. The new terrace blocks in front of Blemundsbury and the bookend to the mews tie in with the terrace on Orde Hall Street. The new Devonshire Block correlates with the height and façade layout of the commercial buildings around Ormond Close.

The new extensions to the existing buildings carry through the language of brick and deep window reveals established around Tybalds Close. The brick elements take the form of vertical planes which combine with horizontal precast slab edges to create a language which responds to the existing gridded elevations of the Tybalds Estate. This language, with variations tailored to each situation, is applied to each block across the site. Particular attention is given to the improvement of main entrances with finely detailed pre-cast stone panels with inset lettering identifying each block.

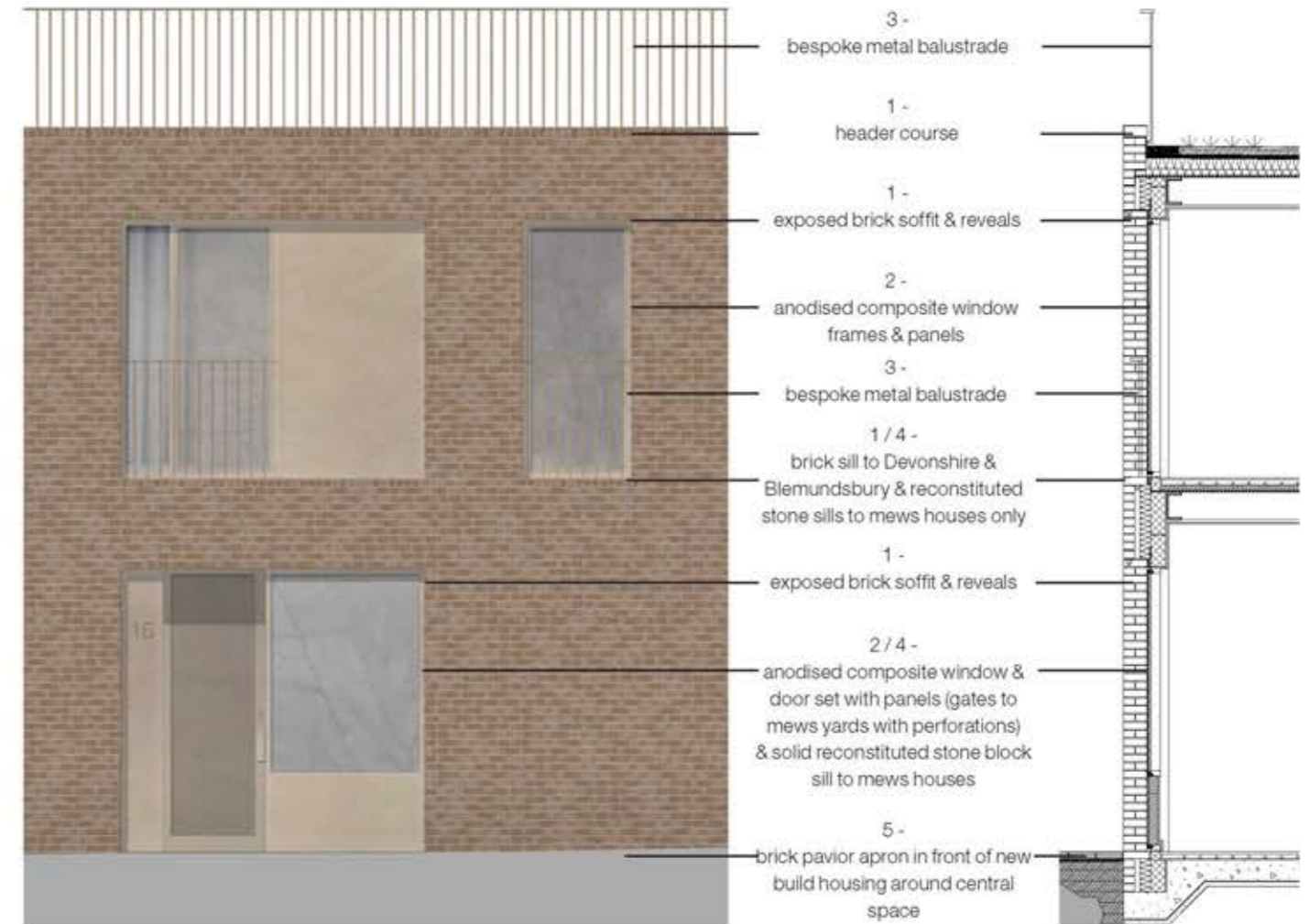
Throughout the scheme, the geometry is simple in order to help legibility & to tie context together & frame spaces, buildings are generally right angular, with slight angle changes to tie in with existing context.

Recessed panels articulate the openings and offer a contemporary interpretation of the historic facades. The in-fills also add a lighter, more domestic quality. Into these apertures, lightweight, hard wearing anodised aluminium windows & doors are inserted, which complement the colour of the surrounding buildings.

Where entrances to blocks are reconfigured such as at Chancellors & Babington, a different material approach is adopted, with prefabricated reconstituted stone panels which are in off white & in certain instances green in order to reflect the colours of the panels to the existing towers.

Whereas the Tybalds Close buildings use brick to articulate solid volumes, in the extension structures, brick becomes a lighter, planar element, with light coloured, finely detailed concrete expressed horizontally. Windows will be carefully detailed, and a louvred screen treatment applied to add further depth and richness to the elevations. This develops into a clear and rigorous language which will unify the development, signposting entrances, with the threshold zones to entrances enhanced with new paving and low brick walls redefining landscaped areas.

Where buildings are overlooked by existing buildings, these are designed as roof terraces or semi-extensive green roofs to ensure their visual quality and to allow for more amenity space. In general recessed balconies are used rather than projecting ones, which allows them to be used across a larger part of the year.



Typical elevation & section through new Blemundsbury, Devonshire & Mews new-builds - Not to scale  
- Refer to palette & precedents on opposite page for material references & to accompanying drawings



1 - Grey/brown textured brick with recessed mortar joints, with large window apertures. Exposed brickwork to reveals & soffit, header course to top of brickwork.

2 - Anodised aluminium composite windows, panels & doors in light bronze/ champagne colour.

3 - Bespoke metal balustrades to high quality spray applied to match window frames as closely as possible & with high quality handrail.

All other visible metal components to match balustrades/panels as closely as possible, including rainwater goods.

4 - Precast reconstituted stone to extension balcony slabs & roof edge fascias, Devonshire Court stair structure, over-cladding to existing buildings, to mews house sills & ground floor upstand.

Tower entrances & Devonshire Court lift shaft to be in light green reconstituted stone.

5 - Brick pavior apron in front of new build housing around the main public spaces to match building bricks.

Materials sample selection, refer also to precedent images below



Precedent:  
Duggan Morris Architects - Kings Grove House.  
Grey/brown textured brick & header course, with large window recesses



Precedent:  
Hawkins/Brown - Kingston Business School.  
Anodised aluminium windows, panels & doors within large punched openings



Precedent:  
Sergison Bates Architects - Urban Housing & Creche, Geneva.  
Slim profile bespoke metal balustrades with high quality floor finish to amenity spaces



Precedent:  
AHMM - Anne Mews.  
Reconstituted stone used to subtly pick out entrances



Precedent:  
Duggan Morris Architects - Yew Tree Lodge.  
Brick pavior apron at base of brick walls to match the brick used for the buildings

The existing buildings express the concrete frame structure with a fine grid of horizontal and vertical framing elements.

By expressing the flank wall of the extensions as a vertical brick plane, these elevations are able to respond to the context of traditional openings in solid brick walls found in the wider context. The vertical planes can be stepped in plan to resolve the requirement for privacy and daylight in the existing apartments whilst presenting an open face with each main living/dining room relating directly to an open balcony expressed as a slender pre-cast stone slab. The concrete horizontality is again expressed at roof level where it forms an elegant lid to the overbuild units which are expressed as a calm alternating pattern of full height glazing and bronze anodized metal.

In specific instances across the Estate, original concrete panel facades which failed over time were overclad with non-contextual corrugated metal cladding. In a number of locations, pre-cast concrete cladding will be reinstated as an elevational treatment. This creates the opportunity to create bespoke patterns, possibly in collaboration with local artists which can provide another level of visual interest to the scheme. Finely detailed concrete panels will also form part of the new entrances to the existing buildings, with cast-in lettering signposting the individual block names.

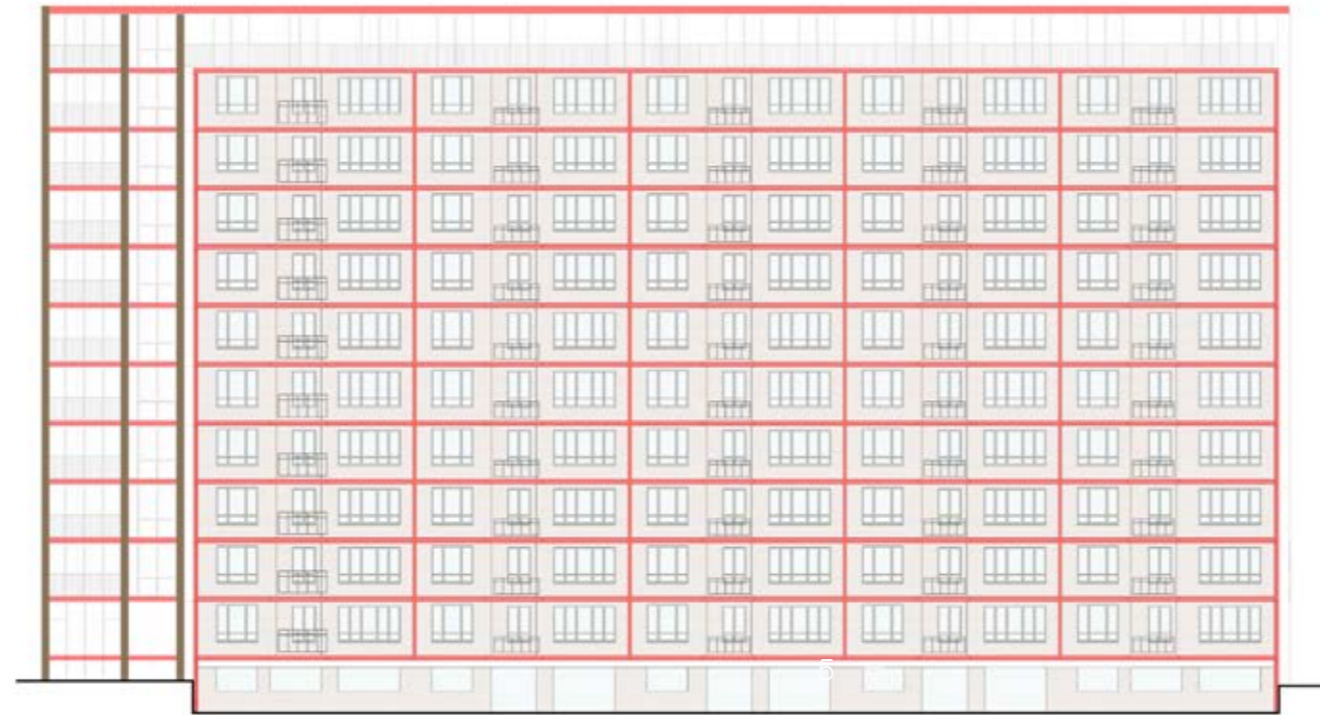
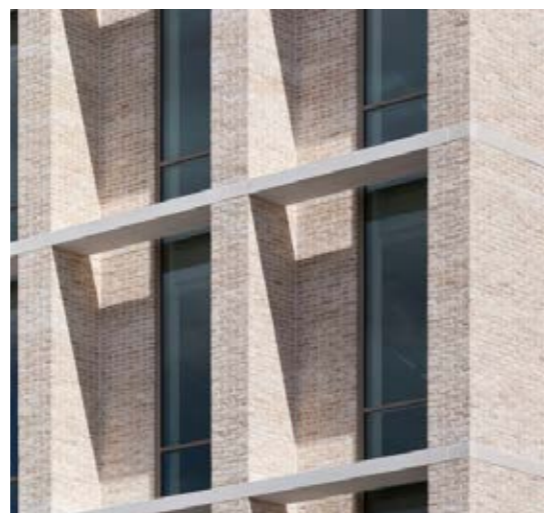
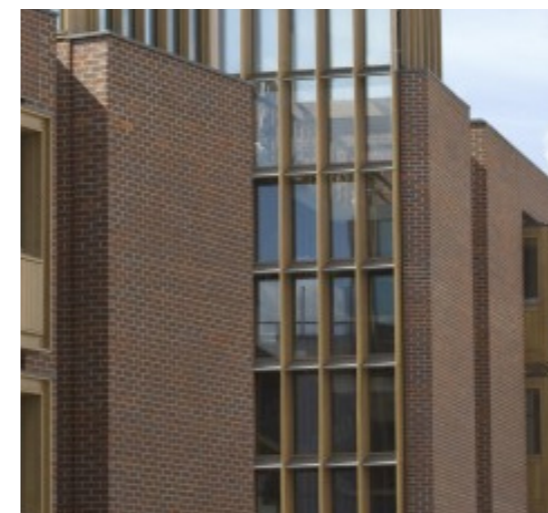


Diagram showing how the brick (in brown) and pre-cast concrete (in red) relates to the existing south elevation of Blemundsbury



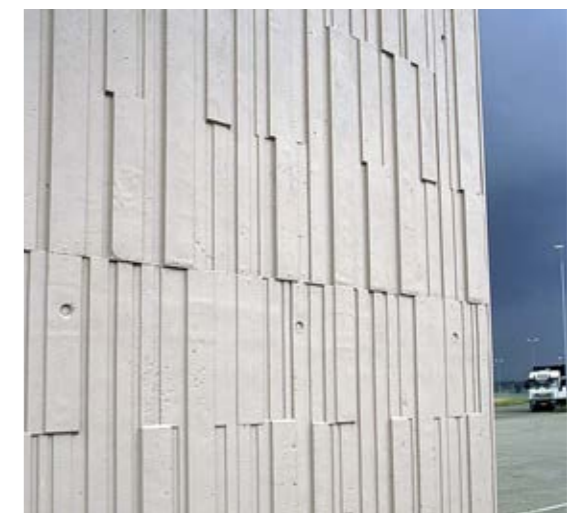
Vertical panels of brick combined with precise horizontal planes of pre-cast concrete

Precedent:  
Reiach and Hall Architects - Dundee House



Vertical panels of brick frame an open glazed facade

Precedent:  
Nial McLaughlin Architects - Somerville College, Cambridge



A bespoke texture applied to pre-cast reconstituted stone panels

Precedent:  
Noeplast concrete formliners





Typical side elevation to the extensions - Not to scale

Anodized aluminium side panels alternate at alternating levels to create a sense of rhythm. The side openings to the balconies are vertically grouped in pairs with the intermediate slab expressed in pre-cast stone. Vertical bands of recessed brick provide visual interest in areas free of windows.

- 1 - Grey brown textured brick
- 2 - Anodised aluminium composite windows, panels & doors. In light bronze/ champagne colour
- 3 - Bespoke steel balustrades to polyester powder coated to match window frames
- 4 - Pre-cast reconstituted stone



Typical elevation where the side extension connects to the roof extension.

The vertical brick panels terminate and the final horizontal concrete plane continues to form a fascia to the roof of the set-back roof extension. The use of anodized aluminium panels continues across the roof with full height openings linking to generous balcony areas.



Elevation showing the treatment of the new main entrance to Windmill.

Each new entrance opens into a generous one-and-a-half height entrance lobby providing a secure welcoming area with post facilities. The elevation shows how each block will be signposted with a finely detailed pre-cast reconstituted stone panel with the block name cast within the panel itself.

The new brick walls will conceal enhanced refuse storage facilities thereby avoiding the current situation of overspill into the streetscape.

- 1 - Grey brown textured brick
- 2 - Anodised aluminium composite windows, panels & doors. In light bronze/ champagne colour
- 3 - Bespoke steel balustrades to polyester powder coated to match window frames
- 4 - Pre-cast reconstituted stone



Elevation showing the pre-cast reconstituted stone wall on the north-east elevation of Blemundsby. This sample shows an example of how a texture can be applied to the panels. This can be subject to design development in collaboration with local artists.

## 5.9 Materials and details strategy: Landscape

The existing landscape and public realm surfacing materials within Tybalds Estate are largely bitumen macadam and concrete. These existing surfacing materials are in a poor state of repair. They do not meet the aspirations for a high quality residential environment.

The majority of the site is to be surfaced with coloured asphalt. This bitumen macadam construction with a coloured wearing course will provide an aesthetically pleasing surface combined with the functional qualities of conventional asphalt. This surfacing material has been adopted by Local Authorities elsewhere for areas of highway construction. The 'buff' coloured wearing course (Tarmac 'Mastertint' or similar) will complement the proposed architecture. It will provide a smooth fully accessible surface that is visually more appealing than conventional asphalt but significantly cheaper than stone paving and more durable than concrete block paving.

Granite channels and trims are to be utilised throughout the Estate to define parking bays and the extent of paved areas. This is an extremely durable material suitable for a trafficked environment. Granite kerbs and edgings are used within highways throughout London.

Areas of tree planting are to be surfaced with a self binding aggregate. The buff colour of this material will complement the wider areas of coloured asphalt whilst providing a flexible and porous surface that will not hinder the development of tree roots. It will provide a surface suitable for pedestrian traffic.

Adjacent to buildings a brick paving apron is to be utilised. This apron is to be constructed from bricks in a rigid mortar construction to match the adjacent building elevation.

Within the communal courtyards of Devonshire and Blemundsbury clay brick pavers are to be installed. This is a high quality natural material in a small unit size that will emphasise the residential nature of these courtyards. A light colour clay paver is to be utilised to reflect natural light.

Where existing pedestrian pavements are disturbed by the works (Orde Hall Street & Boswell Street) the existing precast concrete flag paving is to be reinstated.

Tybalds Square is to be surfaced with granite flags. It is the most important public space within the scheme and will be a focus of public activity for the whole of Tybalds Estate. This is an extremely durable material of the highest quality. Granite materials will also improve with age as opposed to concrete products which can deteriorate. Granite will also be used for terraces and steps.

Brick walls at boundaries are to be constructed from bricks that match the adjacent architecture. Brick walls are to include brick on edge or granite copings. Where required brick walls will incorporate railings.



- P1 - Bitumen macadam with coloured wearing course. 'Buff Quartzite Mastertint'
- P2 - Self binding gravel surface to Tree Pits
- P3 - Brick paving apron to match adjacent building elevation
- P4 - Clay paving in stretcher bond
- P5 - Precast Concrete Flags (to existing carriageway pavements)
- P6 - Granite Flags (Tybalds Square)
- T1 - Granite trims 80mm thick x 200mm depth
- C1 - Granite drainage channel to correspond with gully locations
- S1 - Granite Steps
- W1 - Brick walls with brick on edge coping and granite copings (where required brick walls to incorporate railings to achieve 1.1m barrier)



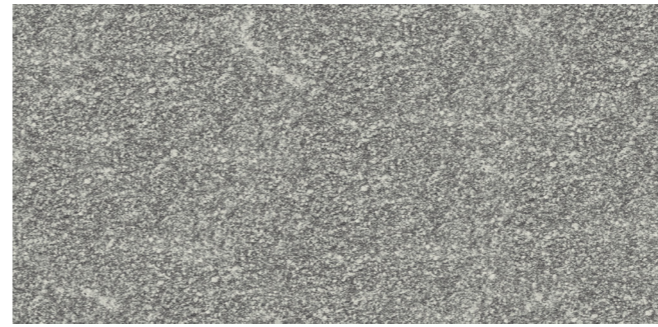
P1 - Bitumen macadam with coloured wearing course



P4 - Clay paving in stretcher bond



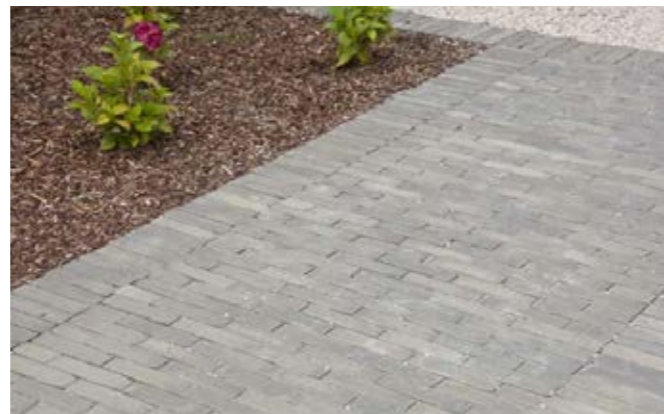
P6 - Granite flags (Tybalds Square)



S1 - Granite steps



P2 - Self binding gravel (Tree Pits)



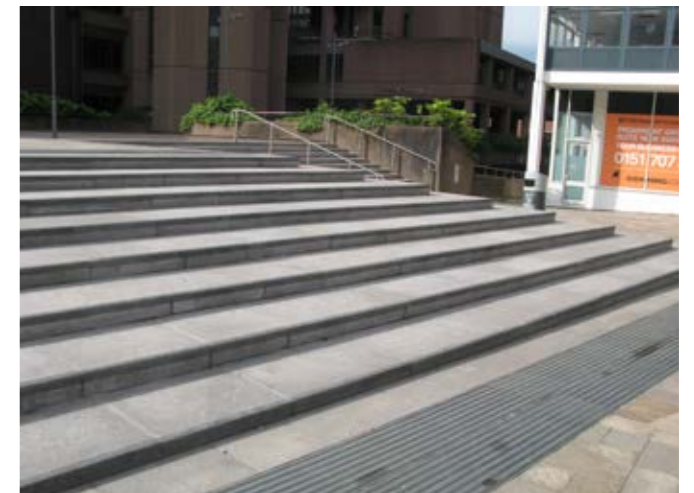
P3 - Brick paving apron to match adjacent building elevations



P5 - Precast concrete flags (to existing highway pavements)



T1 - Granite trims



C1 & C2 - Drainage channels

Indicative palette of materials

# Technical Studies



## 6 Technical Studies

### 6.1 Vehicle movement and car parking

The primary vehicle access to the site will be via a new estate road taken from Orde Hall Street. The new road, Tybalds Close, will be constructed to adoptable standards. It will be a one-way loop road and will operate as a shared surface environment with priority given to pedestrians and cyclists.

The secondary vehicle and emergency access to the site will be from New North Street.

In addition emergency vehicle access will also be able to gain access to the site from Ormond Close. Traffic Regulation Orders will be put in place to restrict the general use of Ormond Close by motorised vehicles. This will be managed by rise and fall bollards.

A further Traffic Regulation Order will be put in place to restrict the use of Barbon Close by motorised vehicles.

#### Area designed to Adoptable Standards

The area shown will be designed and constructed to adoptable standards. The design has progressed in consultation with LBC Highways to ensure that the planning stage proposals are in keeping with acceptable design principles and standards. This is intended to facilitate a possible adoption process at some point in the future, should LBC wish to implement this.

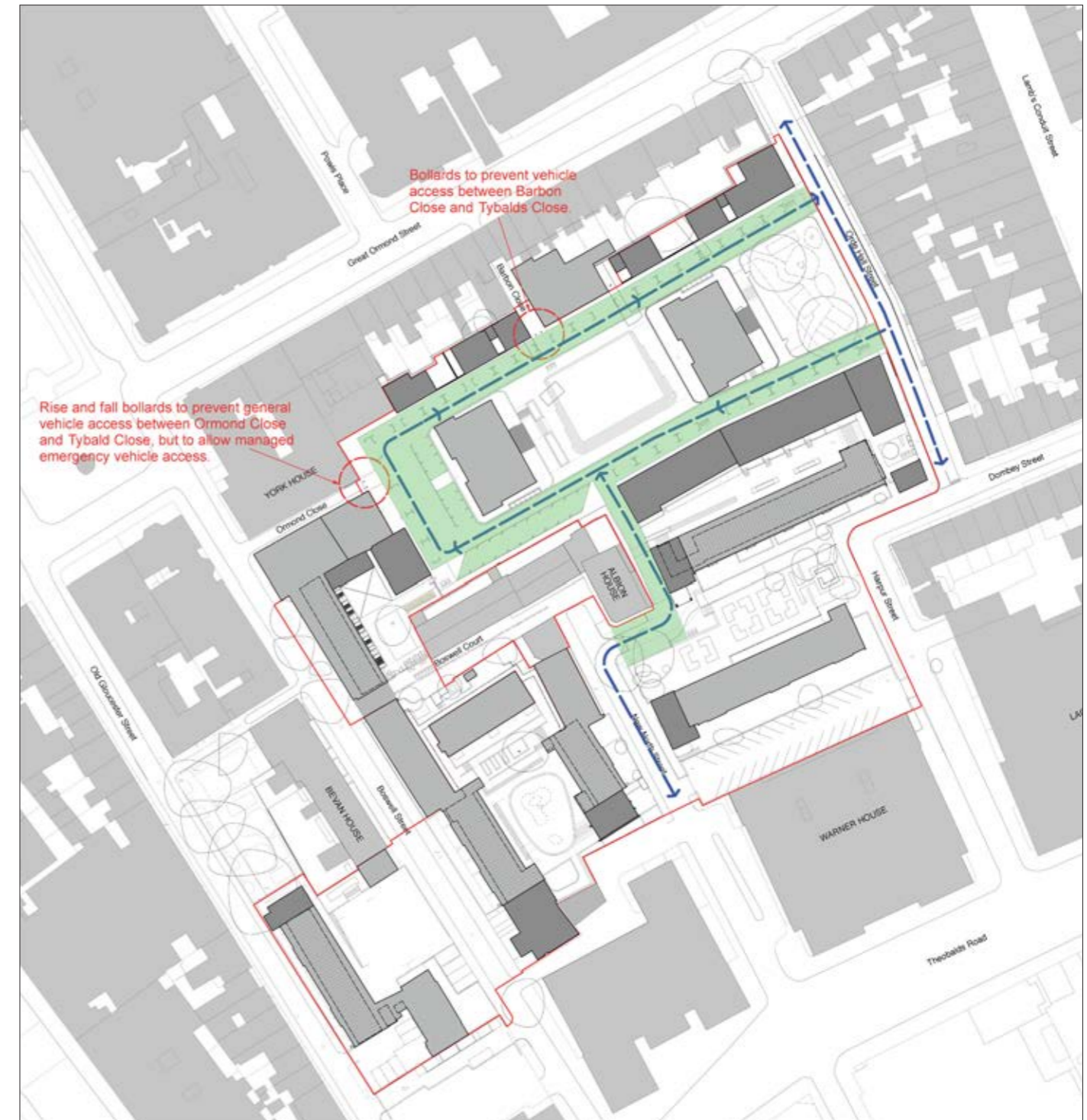
The adoptable area includes all the main vehicular routes, which have been tracked to ensure adequate space for manoeuvring of emergency and servicing vehicles, including LBC refuse collection. The adoptable area includes all of the vehicular parking in Area 1 (Mews Towers and Tybalds Close).

The adoptable area does not include any tree planting.

The proposed street lighting is within the adoptable area.

The proposed surfacing within the adoptable area is pigmented bitmac. The edgings, channels and car park marking out is granite. The gullies to drain this area are all within the boundary. The boundary of this area is clearly defined on site in the form of surface finishes, channels and trims.

The detailed design process for this area will involve technical consultation with LBC Highways, leading to formal approval.



Proposed vehicle movement strategy

- Existing buildings off site
- Existing estate buildings
- Proposed estate buildings
- Proposed estate buildings (overbuilds)
- Area designed to meet adoptable standards



## 6.2 Cycle Parking and Storage

Secure and covered cycle parking will be provided throughout the development areas, with the minimum provision being 1 cycle parking space per new residential unit. This level of provision accords with the policy requirements and standards set out in the London Plan and the LB Camden Development Framework.

The cycle parking for the apartment blocks will be contained within secure communal areas within each individual block. Each of the mews houses will be provided with their own individual cycle parking provision. Additional visitor cycle parking stands will be provided across the site.



Cycle parking and storage plan



## 6.3 Refuse, recycling and collection strategy

### Refuse Areas

The current refuse scheme for Tybalds Estate is based on a rate of three collections per week. All existing buildings are equipped with 1-2 refuse chutes. In the case of Blemundsbury and Devonshire Court the exchange bins are located in the public realm adjacent to the chute door. Two large external recycling facilities serving the two towers and Blemundsbury are also situated prominently in the public realm and often in a significant distance from the front doors of the blocks. In some cases this causes misuse or neglect. The negative appearance and often haphazard organization compromise the outdoor spaces. Moreover the new building and landscaping developments require the current locations to be moved. Therefore it is one of the main aims of the new development to provide for accessible internal and external recyclable waste storage facilities for the existing and new structures.

Kerbside collection for houses:

The proposed refuse scheme for areas 1-3 will allow for kerb-side collection off the loop road for all new houses and flats designed by Duggan Morris Architects / Mae Architects. Refuse cupboards located in the entrance areas will allow for a practical and visually acceptable solution to waste storage.

Recycling facilities:

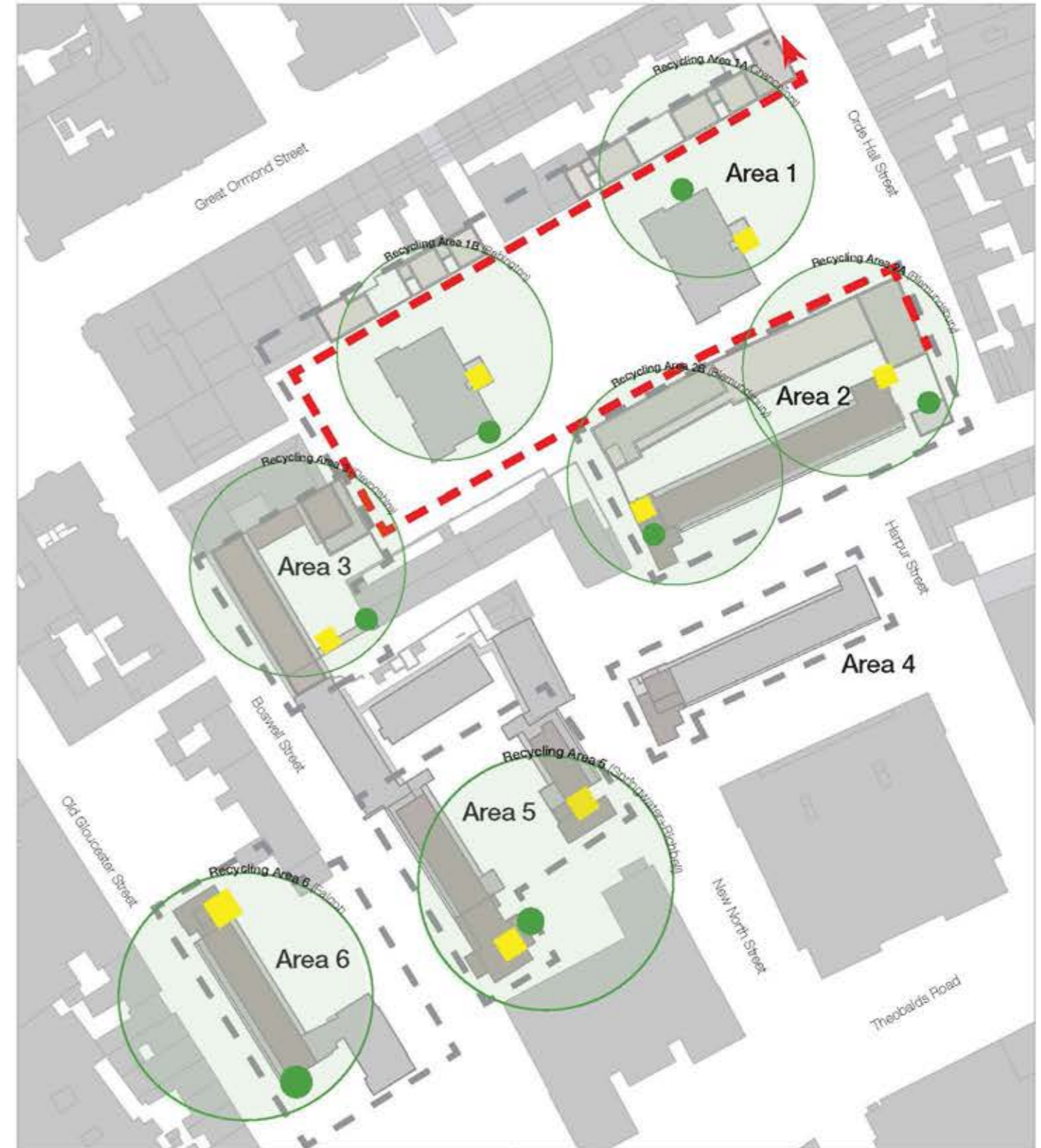
Five allocated recycling areas will be established close to the front doors of Chancellors, Babington, Devonshire and both entrances of Blemundsbury. They will be housed in sheltering cupboards, designed to sit adjacent to the towers

or to be incorporated in the new structures of Blemundsbury and Devonshire block. This will help to keep the visual, spatial and olfactory impact to a minimum. For existing residents, distances to recycling areas will be reduced. The facility sizes have been designed to accommodate any additional refuse by the new houses & Great Ormond Child Hospital, which are assigned to a certain recycling area near to their front door (please refer to diagram). The sheltering structures are designed as open cupboards to allow for an easy and quick disposal of the waste.

General waste & refuse chutes in blocks:

The exchange bins for the maintained refuse chutes of Chancellors, Babington and Blemundsbury will now be housed in internal bin stores. These are located in the washroom extension designed by Avanti as well as the new structure adjacent to Blemundsbury and in new entrance buildings of the towers planned by Duggan Morris Architects / Mae Architects. The general waste for Devonshire Block is stored in the same location as the designated recycling bins.

Across the site the strategy for refuse focuses on providing the current standards for new residential accommodation and where possible improving the refuse facilities for existing residents.



Refuse storage and collection strategy

## 6.4 Play and Recreation

### Existing Play Provision on the estate

The primary play provision is the Orde Hall Street play area. This is a green natural play style facility that is well maintained. It is accessible to the public and surveillance provided from Orde Hall Street reduces risk of antisocial behaviour.

The secure courtyards to Falcon and Richbell / Springwater are valued by residents as playable spaces but the provision is limited in range and quality as described below. The Rose Garden between Blemundsbury and Windmill offers a green playable space with good surveillance and raised beds that can be used by resident families.

The remainder of the space around the estate buildings is not categorised as play space because it is in poor condition, there are no facilities and access is compromised. The large space between Babington and Chancellors is used by young people, mostly as an informal kickabout area, but it is nothing more than an area of informal hardstanding.

### Proposed Play Provision

The table shows a net gain in the playable space provision that exceeds both the LBC and GLA requirements generated from the child yield for the proposed accommodation.

The existing play area at Orde Hall Street would be essentially retained but with the surrounding wall and railings realigned to sit comfortably within the new Tybalds Close and Chancellors frontage. Minor improvements and additions to the existing equipment will be required.

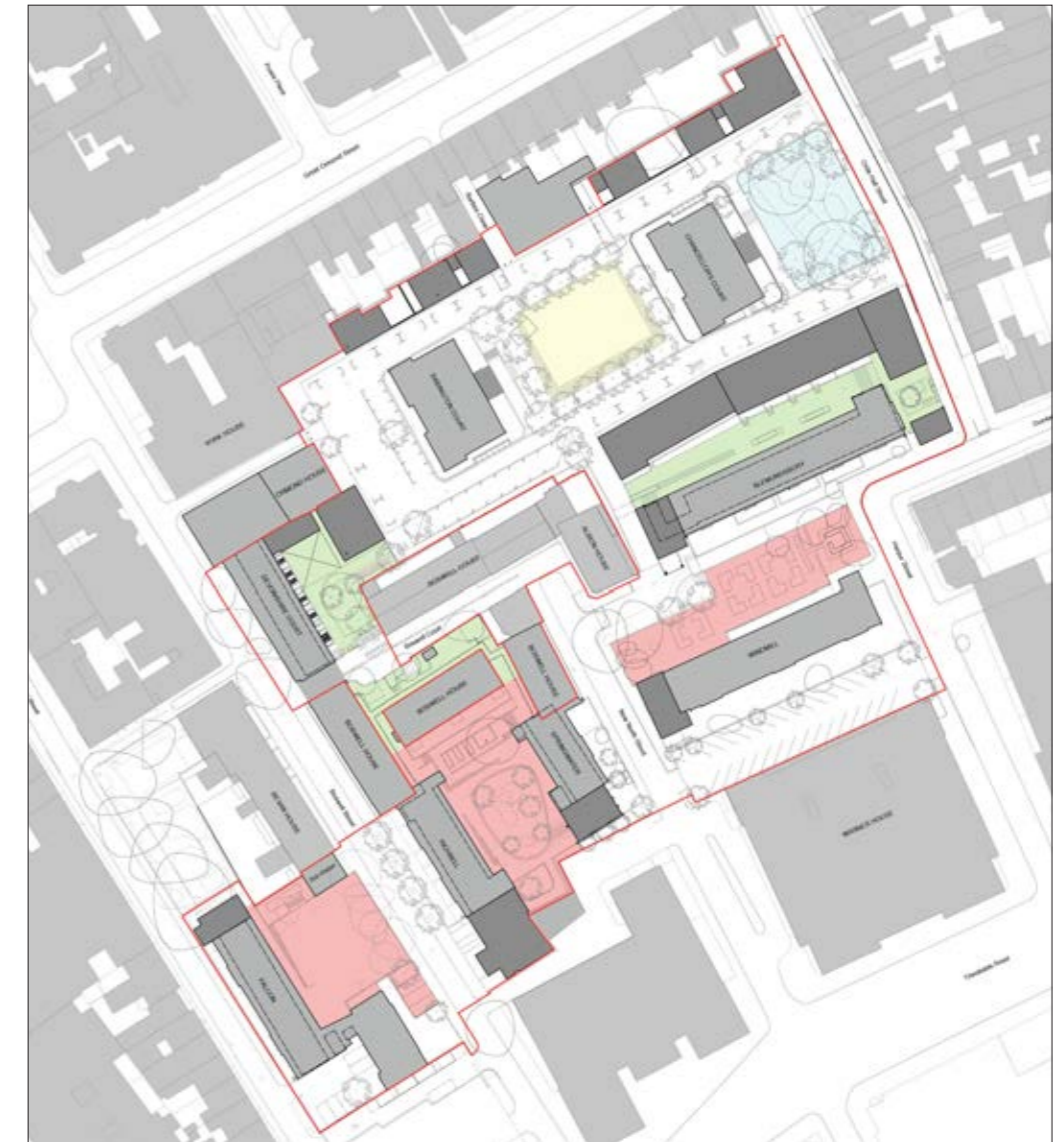
The Neighbourhood Square is a new high quality play space, particularly for older children. It is intended to provide an ideal space for informal kickabout whilst also serving as a multi-functional space for a range of play and other activities. Natural surveillance of this public space will be very much improved by the proposed housing that will front into it.

Two new secure communal playable spaces are created. Blemundsbury Courtyard makes good doorstep play, being overlooked by the private terraces at the back of the new houses and the space is enlivened by its role as a spill out area for the TRA hall. Similarly, Devonshire Courtyard will serve as a new entrance to the existing Devonshire Court and so provide secure doorstep playable space for existing and new residents.

Detailed information on all of these spaces is given in Section 5.



Existing Play Provision Plan



Proposed play space provision

This schedule summarises the provision of existing and proposed playable space on Tybalds Estate. The areas shown include only public spaces and secure communal areas. The areas shown do not include any areas of adopted highway or private spaces.

		Existing Playable Space (m2)	Proposed Playable Space (m2)	Net Gain (m2)	GLA playable space requirement generated by child yield for proposed accommodation (m2)	LB Camden play space requirement generated by child yield for proposed accommodation (m2)
Doorstep Playable Space	Age 0-4 years	267	1128	plus 861	210	114
Local Playable Space	Age 0-11 years	2496	2385	less 111	230	
Neighbourhood Playable Space	Age 0-17 years	616	613	less 3	170	
Youth Space	Age 12-17 years	0	565	plus 565		
		<b>3379</b>	<b>4691</b>	<b>plus 1312</b>	<b>610</b>	



## 6.5 Private amenity space

All of the proposed units in both the extensions and new builds have private amenity space that either meets or exceeds the requirements of the London Plan. Amenity spaces are designed in line with the London Housing Design Guide standards. Care has been taken across the scheme typologies to take advantage of the different site constraints to provide good quality, usable outdoor amenity spaces which where possible enhance the internal habitable spaces which open onto them.

Examples of the different types of spaces are described below:

### *Recessed balconies to Devonshire Court New-build & Orde Hall Street bookends:*

For the new build scheme, recessed balconies are generally used rather than projecting balconies for two reasons, firstly that these sit within the building line, and therefore helps to define the strong urban edge to the central spaces & new access road, their sheltered nature allows them to be used through a longer part of the year, they can also be used as an extension of the living spaces in the summer months.

All private flats located in the bookends adjacent to Orde Hall Street have recessed balconies facing either the playground square or the entrance courtyard of Blemundsbury on Dombey Street. As the balconies are so strongly integrated in to the layout of the apartment, they serve as a true extension of the living space. Sitting in the living room the view towards the kitchen will pass through the light, glazed balcony, bringing the qualities of the outdoor amenity space in to the flat.

At Devonshire Court the recessed top floor flat has a large roof terrace to front & sides, bedrooms access onto this at the front terrace, while a large glazed opening links the living space onto the larger terrace area. The maisonettes have both a recessed balcony at the front on 1st floor, and a yard at ground floor facing towards the new access yard.

### *Terraces to Blemundsbury new-build block*

The houses in Blemundsbury block have different kinds of private amenity space. While the 4b6p houses access their south facing roof terraces from their living room on third floor, the 3b5p houses have both a terrace facing the courtyard on ground floor and a shared roof terrace on top of their dwellings.

### *Private yards & Gardens to the Mews houses*

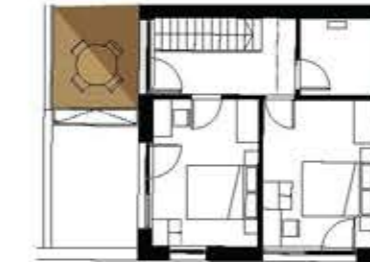
As the mews houses have a shallow depth in plan they have their amenity spaces to the side of each house. They each either have a garden or both a yard and a terrace. This approach allows each unit to have at least double aspect and allows light and air into the plan, it also allows the living spaces to open up directly to the outdoor spaces, with large glazed openings.

### *Side Extensions, Under-builds, & Roof Extensions*

The side extensions, underbuilds and roof extensions to existing buildings all have the benefit of private amenity space which exceeds London Housing Design Guide standards. All side extension balconies are accessed directly from the main living area through double doors providing light and air to the units. The design of the balconies ensures that they do not impact on privacy to the neighbouring units and form a coherent part of the architectural design. The underbuild units to Blemundsbury and Richbell benefit from level access terraces also accessed from the main living space, as do the overbuild units which benefit from the space created by the set back from the existing roof edge.



Devonshire Court new-build typical & upper floor plans



Mews house ground & first floor plans



Blemundsbury Side Extension, Roof Extension and Underbuild plans

## 6.6 Existing and proposed trees

### Summary of Trees Before Development

There are 44 no. trees within the application area. Of these, 33 no. will be retained and 11 no. will be felled. Where trees are felled, it is considered unreasonable to retain them as a constraint to the design, given the LBC aspiration and the balance of constraints elsewhere. The trees which are to be felled are summarised below. The reference numbers are as the Arboricultural Survey, which contains details of all existing trees. Felling of existing trees is mitigated by extensive replanting as described further below.

### Existing Trees to be Felled

Trees 13 and 14 are London planes, early mature and mature respectively. They would be felled to allow the construction of the new Blemundsbury buildings. The complex ground levels and structures around the base of these trees would present a challenging constraint to retention in the event of any estate regeneration.

Tree 19 is a mature apple which will be felled to allow construction of the new Tybalds Close.

Tree 33 is a mature London plane that would be felled to allow construction of the extension to Richbell.

Trees 44 to 47 is a series of early mature limes and whitebeams that would be felled to allow construction of the extension to Richbell.

Trees 41 to 43 are young and early mature cherries. They are poor specimens which should be felled and replaced in any event. New high quality trees will be planted here in greater numbers with improved ground conditions.

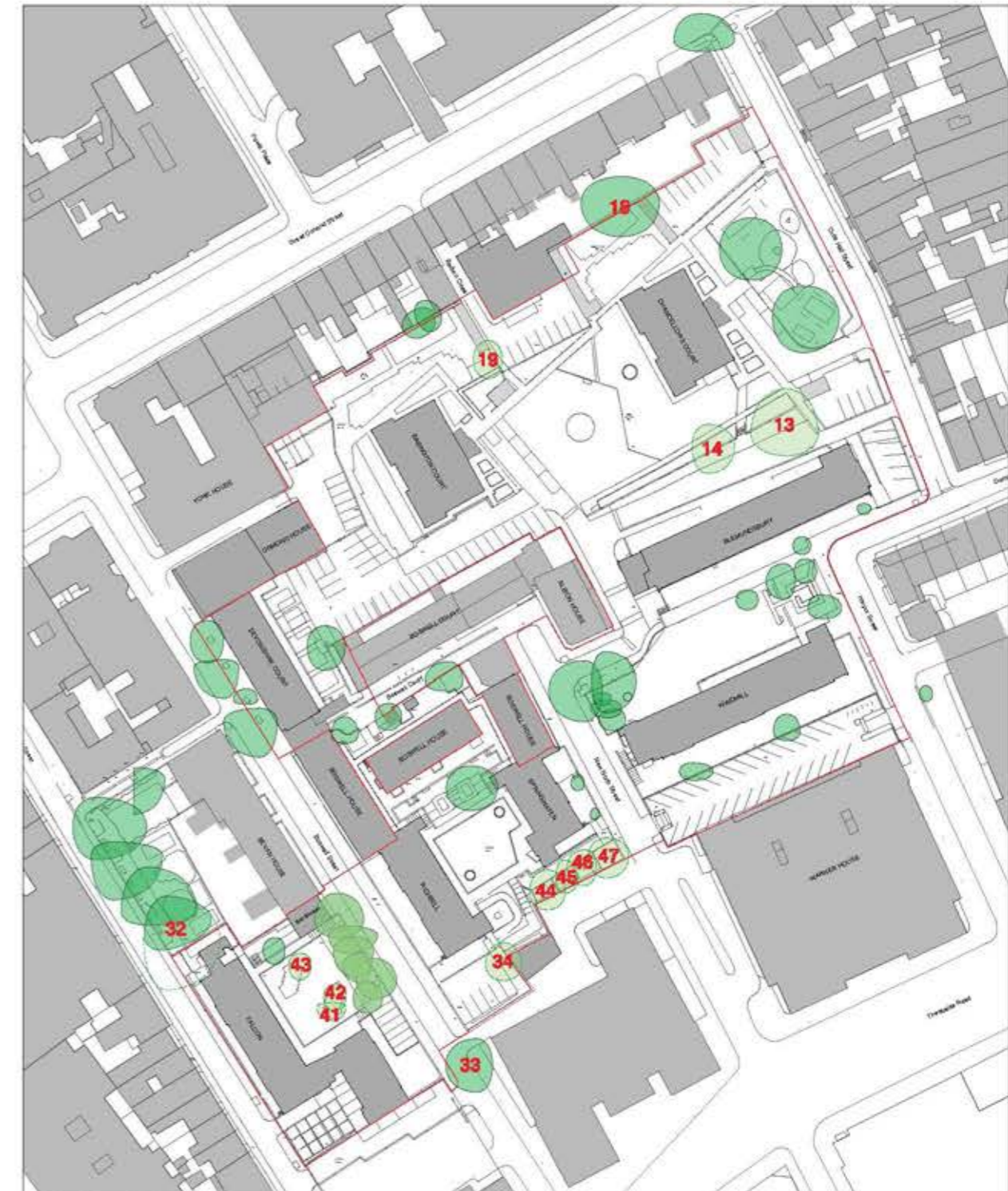
### Off-site Trees

There is a number of existing trees that will make an important contribution following development. These are summarised below.



Tree 18 is a mature sycamore which is north of the site boundary, near the proposed mews houses. The layout of the new buildings accommodates the root protection zone. There is also an unsurveyed mature tree off-site to the north of Babington.

Tree 33 is a mature lime street tree in Boswell Street which will provide a good setting for the extension to Richbell.

Tree 32 is one of a group of mature London planes fronting the play area on Old Gloucester Street. One limb would be removed to accommodate the extension to the north end of Falcon.



Existing Trees Before Development

-  Existing trees to be retained
-  Existing trees to be removed

### Summary of Trees After Development

The plan shows all of the existing trees to be retained together with the proposed trees. The 11 trees to be felled will be replaced by 74 new planted trees. The total number of trees will increase from 44 to 107. Furthermore, the replanting will use high standards regarding tree pit design and stock, promoting healthy development to maturity.

Existing trees to be retained will be subject to inspection and tree surgery. This will deal with ongoing health and structural issues for the benefit of the tree. In some cases crown reduction will reduce unwanted shade, open up views and reduce stress to compensate for changes in ground conditions during and following construction.

The proposed tree planting will provide a green neighbourhood, full of delight and interest to people of all ages. It will enhance the distinctiveness of each space but will also characterise the estate as a whole.

The tree planting plans show proposed locations and species. The design is carefully considered to ensure that the planting survives in the short term and makes an increasing contribution in the long term without making undue call on maintenance resources.

The following factors have governed the selection of species, planting locations and stock sizes.

- ultimate size and space for development to maturity
- vigour of species
- appearance, foliage texture and colour
- seasonal change (blossom, fruit, autumn colour)
- degree of shade cast
- native or 'exotic'
- tendency to damage surrounding surfacing
- requirement for maintenance

Most of the species of trees and other plants will be native to encourage biodiversity in fauna. However, it is also appropriate to introduce some 'exotica'. All plant selection and planting details take account the likely effects of climate change. They also take account of tree diseases such as those affecting horsechestnut and ash.

#### Tree Planting Specification

The planting pits should be as large as possible to ensure sufficient growing medium for the lifetime of the tree.

Generally this should be 12m<sup>2</sup> min. area and 1m depth. The tree pit area does not have to be concentric with the tree planting location. The growing medium will be an urban tree sand type specification, allowing a large pit to support surfacing over. Where possible, trees are planted in open ground (in a grassed area for example). Root barriers will be used where necessary for the protection of adjacent services, structures and property.




Urban trees should be planted at a large 'semi mature' size for maximum impact and resistance to vandalism. The trunk should be trimmed clear for 2.4m min., specified higher in some cases. The anchoring system should be underground and visible tree guards avoided.

The surfacing over the tree pits will be self binding graded aggregate, such as Bredon Gravel. This is permeable, allowing air and water to the root ball and allows the base of the tree to expand freely as it develops. In addition, each tree should have a passive irrigation / aeration pipe built into the tree pit, with a secure cover on the surface.

Trees will be subject to a contractual defects liability period of 24 months, allowing monitoring over two full growing seasons.



Existing and Proposed Trees After Development

-  Proposed tree planting
-  Existing tree to be retained
-  Existing tree to be removed

### Summary table of existing and proposed trees

	Existing trees		Proposed trees	Total no. of trees
	To be retained	To be felled		
No of trees within existing site (before development)	44			44
No. of trees within proposed site (after development)	33	-11	74	107

## 6.7 Biodiversity and roofs

### Biodiversity Summary

An Extended Phase 1 Habitat Survey was undertaken by Middlemarch Environmental Ltd in June 2012. This initial ecological appraisal sets out the baseline conditions and makes recommendations. It is included with the application documents (SD5).

The proposals aim to avoid impacting adversely on existing habitats wherever possible. The following points and recommendations made in the Extended Phase 1 Habitat Survey have been relevant to the development of planning application stage.

### *Trees as Bat Roosts*

It is noted that the existing trees do not offer any suitable features for roosting bats.

### *Bat Foraging*

It is noted that the existing trees, shrubs and scrub provide foraging habitat for bats. The proposals will retain existing greenery wherever reasonable and will increase the quantity of planting and soft areas. Detailed planting design will include species which attract night flying insects.

### *Native Species*

Proposed trees include native species and many seed / fruit bearing species which will be of value to vertebrate and invertebrate wildlife. Likewise, the detailed planting design will include many native species in combination with 'garden' species.

### *Bird Nest and Bat Boxes*

The architecture of the new buildings will include bat boxes and bird nest boxes, and particularly provision of peregrine falcon nest boxes, or specially designed ledge or recess to provide a safe platform for a nest, as part of the design of new tall buildings.

### *Protection of Existing Trees*

Any trees and/or hedgerows on site, or overhanging the site, which are not to be removed as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site.

### *Bat Survey*

To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), an initial bat survey should be undertaken on any buildings which may be impacted by the proposed development works. Initial bat surveys can be completed at any time of year. Should these initial surveys recommend that further activity surveys are required, these further surveys can be undertaken during suitable weather conditions between May and September (inclusive). Ideal activity survey times are in suitable weather conditions between May and August, however surveys in September may be possible but consultation with Natural England / Local Planning Authority is recommended.

### *Nesting Birds*

To ensure compliance with the Wildlife and Countryside Act 1981 (as amended), vegetation clearance or building demolition should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive. If this is not possible then any vegetation that is to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally.

## Categorisation of Roof Uses

All proposed roofs are categorised according to access and use, as shown on the drawings.

This ensures that the use is properly coordinated with the people who will have access to the roof space and the maintenance requirements.

Where roof spaces are accessible to residents, full height parapets are provided. Where roofs are only accessible via secure doors and hatches a mansafe system can be used.

## Semi Extensive Green Roofs

The proposed roofscape includes semi extensive green roof wherever possible. This has more ecological and amenity value than a standard sedum roof. The build up includes 150mm low fertility growing medium, possibly including lightweight additive. The species blend would focus on native wild flowers. A typical seed mix will be :-

- 30% Grasses
  - Poa annual (annual meadow grass)
  - Agrostis capillaris (common bent)
  - Festuca ovina (sheep fescue)
- 70% Wildflowers
  - Achillea millefolium (yarrow)
  - Anthyllis vulneraria (kidney vetch)
  - Centaurea scabiosa (greater knapweed)
  - Daucus carota (wild carrot)
  - Gallium verum (lady's bedstraw)
  - Leontodon hispidus (rough hawkbit)
  - Lotus corniculatus (birds foot trefoil)
  - Thymus vulgaris (thyme)
  - Silene dioica (red campion)
  - Geranium pratense (meadow crane's bill)
  - Origanum majorana (marjoram)
  - Leucanthemum vulgare (ox eye daisy)
  - Tanacetum parthenium (feverfew)
  - Linaria vulgaris (toadflax)
  - Clinopodium vulgare (wild basil)
  - Silene latifolia (white campion)
  - Trifolium pratense (red clover)
  - Scabiosa columbaria (small scabious)

### ACCESS OF ROOF

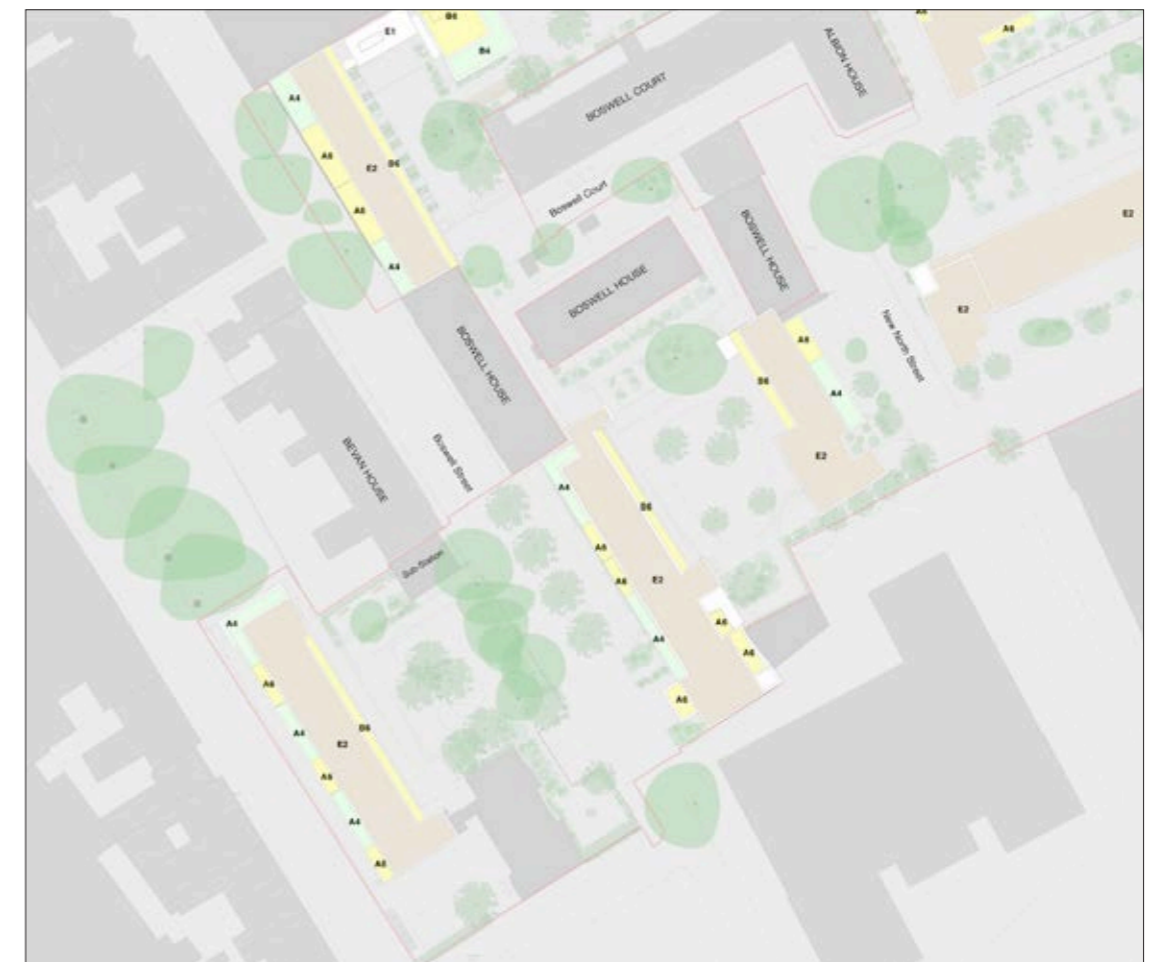
<b>A</b>	Private roof space, accessible only direct from single private dwelling. Maintenance access as habitable space.
<b>B</b>	Communal roof space, accessible direct from communal circulation cores. Maintenance access as habitable space.
<b>C</b>	Shared private roof space, accessible direct from more than one private dwelling. Maintenance access as habitable space.
<b>D</b>	Roofs accessible from secure doors / hatches via internal communal / servicing circulation. Generally no full parapet, mansafe system provided for maintenance.
<b>E</b>	Roofs accessible only by means of ladders, mechanical platforms, scaffolding etc. Maintenance access to be assessed according to tasks.

### USE OF ROOF

<b>1</b>	Barren Roof
<b>2</b>	Brown Roof
<b>3</b>	Extensive Green Roof
<b>4</b>	Semi Extensive Green Roof (e.g. biodiverse meadow)
<b>5</b>	Extensive Green Roof (soil built in-depth suitable for garden planting, vegetables etc)
<b>6</b>	Roof Terrace With Containers (from plant pots to free standing troughs or raised beds for veg planting)



Proposed roof accessibility and use (north of the site)



Proposed roof accessibility and use (south of the site)

## 6.8 Secured by Design

### Secured by Design Principles

Security and a feeling of safety is a primary consideration in estate regeneration. In general terms the proposals reduce public pedestrian permeability, increase surveillance and establish territoriality. This is crucial to promoting sociable behaviour and resident engagement in estate management and husbandry of green spaces.

### Public and Private Space

The proposals for new buildings and spaces are based on a clear definition between space which is accessible to the public and space which is secure for residents, either communally or privately. Two new secure courtyard gardens are proposed at Devonshire and the north side of Blemundsbury.

In many places the proposed buildings provide new secure entrances to existing secure spaces, for example Falcon Courtyard and Richbell / Springwater Courtyard.

### Passive Surveillance & Defensible Space

The layout of the proposed Tybalds Close will build on the existing fragments of frontage (principally at Barbon Close, York Close and Ormond House) to create a series of spaces surrounded by positive frontage. This will extend from Orde Hall Street to Ormond Close and bring greatly increased passive surveillance to the whole area.

The two tower blocks, Babington Court and Chancellors Court, will be surrounded by low walls with planting behind. This will provide buffer space between public thoroughfares and windows to private dwellings. This approach is used elsewhere to create territoriality, in addition to providing greenery.

### Pedestrian Routes

There are two places where existing public pedestrian routes will be closed. Firstly, the convoluted route behind Devonshire Court, linking Boswell Court with the rear of Babington will become a secure space. Secondly the low level route along the north side of Blemundsbury, with

ramps at both ends, that links Orde Hall Street with the area to the east of Albion House will become a residential courtyard. Existing public access through both of these areas is associated with ongoing antisocial behaviour and the proposals here represent a significant benefit in terms of security for residents.

Throughout the estate opportunities have been taken to make pedestrian routes more appealing and safe. For example, the removal of the existing stair core at Devonshire has allowed the widening and improvements in visibility to Boswell Court, adjacent to the existing passageway to Boswell Street. Another example is the south end of Barbon Close which will emerge out onto an open and well lit residential close. A third example is the route across the south side of Blemundsbury where the existing steps, right angle turns and poor visibility will be replaced by a straight level path with clear views in both directions.

### Detailed Design

All communal entrances and each residential entry door will be to BS pas 23/24 2012.

All accessible and opening windows will be to BS PAS 23/24 2012 with 6.4mm laminated glass.

Post delivery will be a through the wall system, external boxes or if internal boxes a foyer developed and each door leading off this foyer will be to BS PAS 23/24 2012

Access control will be audio and video. No trades button will be fitted.

Exterior lighting of the site will be to BS 5489 and provide a uniform standard of lighting.

CCTV will comply with the information commissioners guidelines. [www.ico.gov.uk](http://www.ico.gov.uk)

Refuse and cycle storage will have fit for purpose self closing and locking doors.

Generally cycle stores are not in excess of 10 per store to prevent access to an attractive target.

Utility meters will be centrally located where possible.



Diagram illustrating how the Secure by Design principles have been addressed at a side wide level

