6.0 APPEARANCE

6.3 KEY VIEWS

Indicative sketch of the proposed scheme - the building steps down towards Linden Terrace and there is a clear transition in scale, massing and bulk

7.0
LANDSCAPING

7.0 LANDSCAPING

7.1 BOUNDARY TREATMENTS

High Road

The boundary along the High Road has a 600mm high brick wall to match the main facade with soft planting behind. This gives a 'defensible' green buffer zone between High Road and the proposed studio windows. The landscaped buffer zone is approximately 4.5m deep. A low level brick wall (600mm high) will run along the High Road boundary creating a clear separation between the public and private zones.

Underneath the front landscaped buffer space is an attenuation area consisting of a cellular storage tank (12.5x2x1m) which drains into the water sewer within the adopted road. Please refer to the drainage report by Cotswold Transport Planning for further details.

Packet Boat Lane

Significant highway improvements along Packet Boat Lane will be provided, including a much wider and safer pedestrian foot-way zone of 2.4m, and a generously planted landscape buffer directly along the perimeter of the building's edge. The resident's lounge area faces onto the street creating an active and lively frontage to the main road, and enhancing security for the pedestrians passing by.

The flowers and trees throughout the proposed scheme will provide visual delight to the street-scape and for students when looking through the studio windows along High Road and Packet Boat Lane.

Proposed ground floor site plan

600mm brick/concrete plinth wall continues along the front of the boundary line demarcating the private and public zone.

Hedges, low-level planting and pot planted trees along the front elevation to create a natural spaced green buffer zone to the front of the proposed development.

Defensible space provided to both side of the street. The resident's lounge area faces onto the street and the landscaped green buffer which softens the development, in addition to enhancing biodiversity and wildlife. The landscape area will be planted to a mix of trees and plants and significantly improves the existing condition.

Boundary treatment along front elevation facing High Road

7.0 LANDSCAPING

7.2 AMENITY AREA AND FRONT LANDSCAPING

The scheme incorporates green landscaped spaces both to the front and rear of the development. In total, the scheme delivers approx 285 sqm of green space at ground floor level of the proposed development. The amenity space will include hard and soft landscaped areas with seating areas for residents to enjoy. The rear amenity space is located adjacent to the external ancillary spaces for ease of access to and from the cycle stores. An external passageway to the west of the building provides direct access to the street from the private landscaped courtyard.

The mix of trees and planting with the proposed landscaped courtyard area enhances the opportunities for wildlife and biodiversity compared with the existing site. The existing site consists of a large hard surfaced car park with no landscaping, therefore, the proposed scheme significantly enhances the quality of green spaces within the site. Green roofs are incorporated above the cycle/bin store, including multiple levels on the main building.

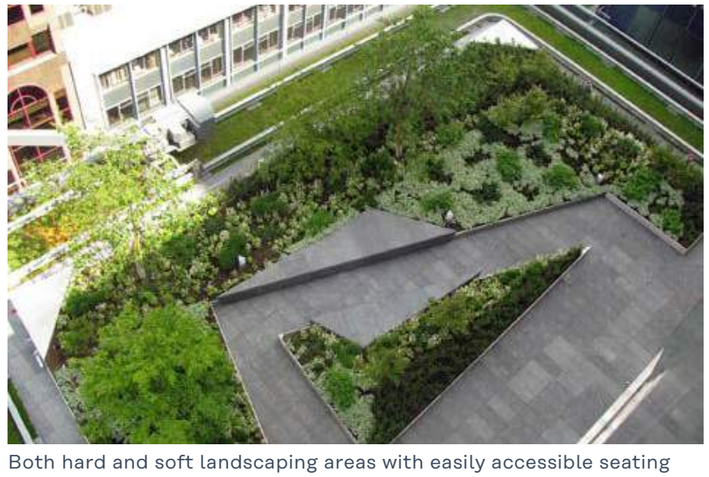
The adjacent precedent images provide a visual aid to represent the landscaping aspirations of the amenity spaces.

Ground Floor Plan

Raised planters to the front landscaping with small trees and low level shrubs.

Transitions between hard and soft landscaping, particularly at the edge/perimeter

Seating integrated into the raised or low level planters



Both hard and soft landscaping areas with easily accessible seating

7.3 URBAN GREENING FACTOR

In accordance with the new London Plan 2021, the Urban Greening Factor (UGF) has been carefully considered and calculated alongside the proposed landscaping strategy to achieve the best urban greening factor based on the site and viability constraints. The proposed development achieves a UGF score of 0.5902.

The proposal provides extensive green roofs above the cycle and bin store at ground floor level, the set back flat roof to the rear of first floor level and the various flat roofs on the upper floor levels. In addition to the roof, the proposal provides areas of flower-rich perennial planting, standard trees and ground cover planting, along with some mature shrub planting and permeable paving. The proposal is a significant improvement on the existing site which offers little planting and is predominately a hard surfaced car-park area.

The introduction of new trees and plants will enhance the biodiversity of the site and the surrounding adjacent area. The rear landscaped courtyard is south-facing and offers many ecological benefits, and enhances the well-being of students who will use the amenity space.

Extensive green roof

Urban Greening Factor Calculator				
Surface Cover Type	**Factor**	**Area (m²)**	**Contribution**	**Notes**
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	0	0	
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1	0	0	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	0	0	
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8	0	0	
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7	438	306.6	Green roof above cycle and bin area. Green roof to flat roof above circulation core.
Flower-rich perennial planting.	0.7	123.5	86.45	Planting with landscaped courtyard amenity space and along front of proposed development.
Rain gardens and other vegetated sustainable drainage elements.	0.7	0	0	
Hedges (line of mature shrubs one or two shrubs wide).	0.6	28	16.8	Shrubs to rear within borders (adjacent to bedroom windows) and to side of the proposed development.
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	104	62.4	Trees planted within rear landscaped courtyard.
Green wall –modular system or climbers rooted in soil.	0.6	0	0	
Groundcover planting.	0.5	75	37.5	Planting to front of development and within rear courtyard amenity space (adjacent to bedroom windows) and along the south.
Amenity grassland (species-poor, regularly mown lawn).	0.4	0	0	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3	0	0	
Water features (chlorinated) or unplanted detention basins.	0.2	0	0	
Permeable paving.	0.1	173	17.3	Permeable paving to rear landscaped courtyard, including to external cycle/bin areas.
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0		0	
Total contribution			**527.05**	
Total site area (m²)			893	
Urban Greening Factor			**0.590201568**	

Urban Greening Factor Calculation Table.

8.0 AMOUNT

The schedule adjacent and on the following page details the amount of development within the new proposals. In summary the development comprises of 61 studio units in total, of which 7 units (10% provision - 6.1) are wheelchair accessible studios to M4(3) Building Regs Standards (highlighted in green).

The building contains a laundry room, WC, resident's lounge area, cycle stores, bin refuse store, plant room/ cleaner's store, and outdoor amenity space on the Ground Floor.

PADDINGTON PACKET BOAT
Ref: 150

rev A	**15.02.2022**	**revised scheme**
Rev B	**16.05.2022**	**revised scheme**

BENCHMARK ARCHITECTS

floor level	unit no.	type no.	unit type	occupancy	unit NIA SQM	SQFT	unit no.	total unit NIA SQM	SQFT	total unit no.	total sellable NIA SQM	SQFT	total NIA SQM	SQFT	total GIA SQM	SQFT	% NET:GROSS
									TOTAL	**61**	**1228**	13217.1	**1231**	13249.4	**1873**	20165.3	**66**
									1 bed studio 1 bed accessible M4(3)	7.00							
ANCILLARY ACCOMMODATION																	
Level 0 -Site			Residential Amenity Landscaped gardens					190.0									
Level 0 - Ground Fl			Resident's Lounge					78.0									
Level 0 - Ground Fl			Reception					24.0									
Level 0 - Ground Fl			Cycle Store Area					53.7									
Level 0 - Ground Fl			Refuse Store Area					27.0									
Level 0 - Ground Fl			Laundry + Cleaners Cupboard					23.0									
Level 4 - Fourth Fl			Proposed Plant					14.0									
NIA for ancillary accommodation includes communal ground spaces + laundry											**125**		**128.0**				
RESIDENTIAL ACCOMMODATION																	
Level 0 - Ground Floor										**11**	**182**	1959.0	**182**	1959.0	**413**	4441.2	**44**
Level 0 - G 01			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 02			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 03			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 04			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 05			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 06			Studio	1 bed 1 person	15.8	170.1	**1**	15.8	170.1								
Level 0 - G 07			Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 0 - G 08			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 09			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 10			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 0 - G 11			Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1 - First Floor										**18**	**313**	3364.8	**313**	3364.8	**398**	4279.8	**79**
Level 1	**01**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**02**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**03**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**04**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**05**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**06**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**07**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**08**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**09**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 1	**10**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 1	**11**		Accessible Studio M4(3)	1 bed 1 person	31.9	343.4	**1**	31.9	343.4								
Level 1	**12**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**13**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 1	**14**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 1	**15**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**16**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**17**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 1	**18**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								

8.0 AMOUNT

Schedule continued...

floor level	unit no.	type no.	unit type	occupancy	unit NIA SQM	SQFT	unit no.	total unit NIA SQM	SQFT	total unit no.	total sellable NIA SQM	SQFT	total NIA SQM	SQFT	total GIA SQM	SQFT	% NET:GROSS
									TOTAL	**61**	**1228**	13217.1	**1231**	13249.4	**1873**	20165.3	**66**
									1 bed studio 1 bed accessible M4(3)	7.00							
Level 2 - Second Floor										**15**	**283**	3041.9	**283**	3041.9	**398**	4279.8	**71**
Level 2	**01**		Accessible Studio M4(3)	1 bed 1 person	23.3	250.8	**1**	23.3	250.8								
Level 2	**02**		Studio	1 bed 1 person	19.8	213.1	**1**	19.8	213.1								
Level 2	**03**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**04**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**05**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**06**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**07**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 2	**08**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 2	**09**		Accessible Studio M4(3)	1 bed 1 person	31.9	343.4	**1**	31.9	343.4								
Level 2	**10**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**11**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**12**		Accessible Studio M4(3)	1 bed 1 person	25.5	274.5	**1**	25.5	274.5								
Level 2	**13**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**14**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 2	**15**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3 - Third Floor										**12**	**229**	2461.7	**229**	2461.7	**398**	4279.8	**58**
Level 3	**01**		Accessible Studio M4(3)	1 bed 1 person	23.3	250.8	**1**	23.3	250.8								
Level 3	**02**		Studio	1 bed 1 person	18.9	203.4	**1**	18.9	203.4								
Level 3	**03**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3	**04**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3	**05**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3	**06**		Studio	1 bed 1 person	15.9	171.1	**1**	15.9	171.1								
Level 3	**07**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3	**08**		Accessible Studio M4(3)	1 bed 1 person	30.1	324.0	**1**	30.1	324.0								
Level 3	**09**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 3	**10**		Studio	1 bed 1 person	19.1	205.6	**1**	19.1	205.6								
Level 3	**11**		Studio	1 bed 1 person	21.2	228.2	**1**	21.2	228.2								
Level 3	**12**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 4 - Fourth Floor										**5**	**97**	1044.1	**97**	1044.1	**268**	2884.8	**36**
Level 4	**01**		Accessible Studio M4(3)	1 bed 1 person	23.3	250.8	**1**	23.3	250.8								
Level 4	**02**		Studio	1 bed 1 person	18.9	203.4	**1**	18.9	203.4								
Level 4	**03**		Studio	1 bed 1 person	17.7	190.5	**1**	17.7	190.5								
Level 4	**04**		Studio	1 bed 1 person	16.7	179.8	**1**	16.7	179.8								
Level 4	**05**		Studio	1 bed 1 person	20.4	219.6	**1**	20.4	219.6								

9.0 ACCESS

9.1 SITE ACCESS

The adjacent plan shows the location of cycle, motorcycle and disabled car parking along with refuse storage. It was agreed that the collection of refuse waste was deemed acceptable from Packet Boat Lane following a meeting with the highways officer, Senober Khan, on the 7th April 2022.

A disabled car parking space is provided on site which complies with Building Regulations and provides the necessary clear zones around the parking bay. The building has been inset on the corner adjacent to the disabled car parking bay to provide a clear 2m zone between the parking bay and building to allow ease of access for collection teams.

KEY

- Disabled car parking bay
- Visitor cycles
- Motorbike parking
- Residents cycle storage
- Refuse and recycling store
- Refuse collection point

Ground floor plan highlighting cycle and refuse locations

9.0 ACCESS & BUILDING ORGANISATION

9.2 CYCLE AND CAR PARKING

Cotswold Transport Planning have prepared a Transport Statement, a Travel Plan Statement and a Moving In/ Moving Out Strategy for student accommodation. For visibility and tracking please refer to the Transport Statement.

The scheme provides nil car parking on site, except for one disabled car parking space to maximise the potential for sustainable travel, and provides 64 no. secure cycle parking spaces. There is a mixture of cycle storage within the building. The majority of the cycle stores are gas operated double stacked cycle stands to achieve a more efficient storage solution with some covered Sheffield stands located to the front of the building and within the landscaped courtyard, and 6no. easy access cycle spaces located close to the main entry point. The easy access cycle spaces allow less-able persons to store cycles safely and securely within the site.

There are 3 visitor spaces located adjacent to the building entrance. The cycle provision is in excess of the requirements of the New London Plan (2021) requiring a minimum of 0.75 cycle spaces per student bedrooms. There are 3 motorcycle spaces proposed adjacent to the main entrance. Cycles can be accessed externally on Packet Boat Lane through a secured gate to prevent unauthorised access. The cycle storage design has been considered in relation to the London Cycling Design Standards and provides a mix of cycle storage solutions to allow all persons to use the facilities.

9.3 WASTE AND RECYCLING

Within each studio space, refuse and recycling spaces will be provided within the kitchenette space. It is then the residents responsibility to take the bin and recycling waste to the secure refuse collection space on the ground floor. The waste provisions fully adhere to the requirements of the London Plan 2021 which state 100 litres (ltr) for each unit. The scheme provides a total of 8 x 1100ltr wheelie bins including 6 standard and 2 recycling bins.

There is a refuse collection area adjacent to the highway which provides ease of collection for the Council's refuse collection teams. The refuse store has secure locked doors for security and the corner of the main building is inset to provide a 2m clear zone between the building and disabled car parking bay, to allow collection teams to collect bins easily.

9.4 INCLUSIVE ACCESS

The building has been designed to allow access for all. A disabled car parking space has been provided on site. All external and internal door thresholds are level and adequately wide. All external amenity areas will have level access, including external access routes to cycle stores. All levels of the building can be accessed by a lift and circulation spaces within the building which allows for adequate passing and turning for residents and visitors alike.

All dwellings will meet the following standards:

The scheme will provide 10% Category 3- M4(3) studios which meet the requirements of the New London Plan 2021 and the remaining 90% studios are Category 2 - (M4 (2).

To access the category 3, M4 (3) studios located on the upper levels, a wheelchair accessible lift has been provided, including a wheelchair refuge area adjacent to the main staircase. The lift is an evacuation lift. There is an accessible WC and laundry on the ground floor adjacent to the communal lounge.

Design Standards


Gas operated cycle stands


Sheffield Stands


Covered bike stands

The scheme consists of a mixture of different cycles storage solutions, including wider sheffield stands to allow less able persons to access and store cycles.

10.0 BUILDING ORGANISATION & FIRE

10.1 BUILDING ORGANISATION

KEY

- Disabled car parking access
- access to external site areas
- access to main building
- vertical circulation
- horizontal circulation
- studio accommodation

Ground Floor Plan

Second Floor Plan

North

10.0 BUILDING ORGANISATION & FIRE

10.2 BUILDING ORGANISATION & FIRE ESCAPE

The adjacent image shows how the building is organised.

Generally the building provides:

- The communal entrance is located on the corner of High Road and Packet Boat Lane. This is the main entry and exit point.
- The entrance has a residents lounge and reception with access to the core. In the event of a fire, a fire curtain will enclose the lounge area to provide a safe evacuation out of the building.
- A simple 1 core solution to the circulation has been adopted with a single evacuation lift and stair zone which takes residents from the ground floor up to level 04. The plant room and flat green roof level is accessible from the main core for maintenance purposes but access is locked and secured to prevent unauthorized access.
- All the studios are arranged around the perimeter of the building. Access to all studios is via a protected corridor adjacent to the lift and stair core.
- Back of house ancillary accommodation including refuse stores and cycles are located to the side of the building providing ease of access for residents and refuse collection teams.
- A further secondary fire escape to the west is provided at ground level through the cycle access.

Fourth Floor Plan

11.0 SUSTAINABILITY STRATEGY

Waterman Infrastructure & Environment Limited have prepared an Energy Statement which should be read in conjunction with this Design and Access Statement.

In summary the Sustainability report recommends the following:

- Minimise the carbon footprint by replacing an energy inefficient building with a highly efficient low energy building using energy efficient heating, ventilation, lighting and appliances to achieve a 35% reduction in CO2 emissions over that required by Building Regulations. Energy modelling has been undertaken using SBEM and the carbon savings (CO2) delivered at each stage are included within the detailed report. The cumulative on-site savings equates to 34.7 tonnes of CO2 per annum - a total of 69% saving (Table 3 - Regulated Carbon Dioxide savings from each stage of the Energy Hierarchy, Page 15).
- Low carbon and renewable technology involving ASHP (air source heat pumps) for space and hot water heating.
- Windows set back to provide shading from the sun. Treatments to glazing such as solar control to ensure good daylight but limit solar gain and prevent overheating.
- Natural ventilation to allow cooling of spaces during summer months and reduce energy consumption.
- Very low U-Values to limit energy consumption and carbon emissions through consideration of the performance of the building envelope. Low U-values reduces the heat loss through the building.
- Low air permeability rates to reduce heat losses in winter and heat gains in summer, and to increase efficiency of the mechanical ventilation system.

Proposed Ground Floor Plan

11.0 SUSTAINABILITY STRATEGY

- Careful design to remove thermal bridges and therefore reducing heat loss through the building. Consideration to be given to Accredit Construction Details performance, or better.

- Good lighting efficacy, likely requiring extensive use of LEDs. Efficient external lighting with controls to avoid energy wastage and unnecessary operation during daytime.

- Minimise water consumption through the use of low water use fittings. Reduce surface water run off with the introduction of soft landscaping. These will also assist to reduce and absorb both air and noise pollution and enhance the biological biodiversity of the site. Incorporation of permeable surfacing within the landscaping and drainage attenuation.

- Take advantage of good local public transport network while also encouraging other low carbon transport options through the provision of secure cycle storage. The scheme provides 1no. disabled car parking space on the site.

- Use of sustainable construction methods using materials with low embodied energy from renewable sources which also minimise on site waste. Minimise waste during the demolition process and construction period.

- Provide appropriate recycling facilities to minimise waste going to landfill both during construction and consequently after occupation.

- Mitigate noise and air pollution entering the building, while enhancing the overall environmental quality of the site.

- Introduction of permeable surfacing to external areas including a mix variety of trees, plants, flowers and green roofs to enhance biodiversity and ecology. Trees provide shading during the summer to reduce overheating.

- Introduction of orientated photovoltaic panels on level 05 flat roof (location of PV's shown on roof plan).

Precedent photos of cycle storage solutions, green roof and PV panels

11.0
SUMMARY AND CONCLUSION

11.0 SUMMARY AND CONCLUSION

In summary, the development will provide student accommodation for Brunel University London. The proposal consists of 61 studio units, 7 of which are wheelchair accessible studios. Residents will have access to ground floor communal areas, shared landscaped garden and a disabled car parking space. Each unit will have secure cycle and refuse storage in line with current planning policy standards. The proposals have already been approved as shown in this document. The application

The design of the proposals have been carefully considered in terms of massing, form and materiality to sit harmoniously within the street-scape and respond positively to the surrounding buildings.

The proposals will utilise a vacant pub, which is no longer in use and derelict. The high quality design of the proposal makes a positive contribution to the area and provides much needed student accommodation within the area.

The materials proposed on the design of the facade take influence from the surrounding material palette and are of high quality with contemporary architectural detailing. The existing building on the site sits at the back edge of the narrow pathway and offers no landscaping to the street front. The new proposal is set further back which significantly improves the public realm and street, in line with the adjacent buildings, allowing room for street trees and landscaping at the front of the building, including enhancing the footpath along Packet Boat Lane.

Whilst market conditions and viability of the scheme is being reviewed and additional information is provided with this new application the scheme will still deliver the same quality architecture as the previous approval.

For the reasons outlined above, we believe the application should be fully supported.

CGI of the development

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