

# **BUILDING LIFECYCLE REPORT**

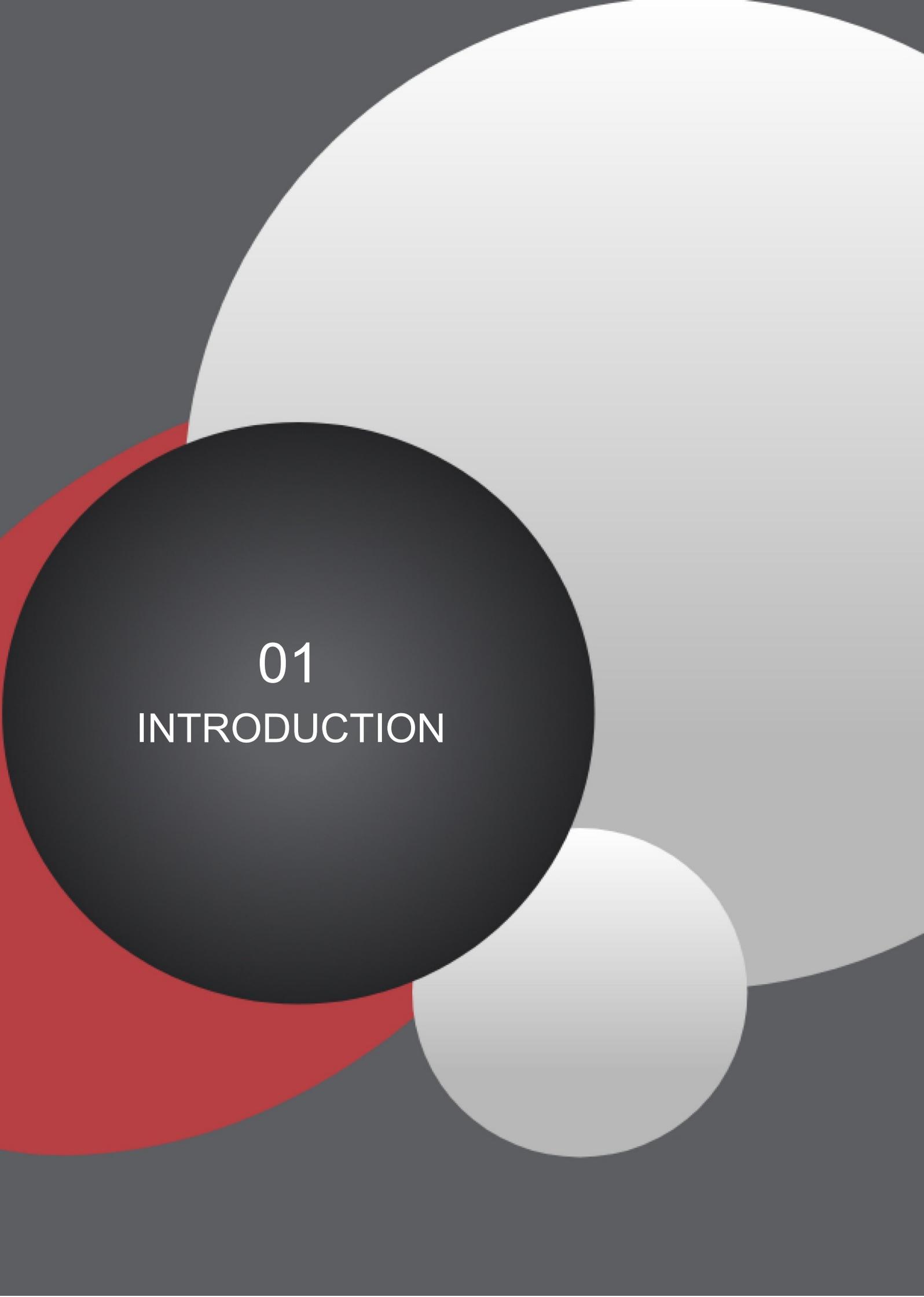
**PROPOSED DEVELOPMENT:  
SANDFORD ROAD SHD**



**CLIENT:  
SANDFORD  
LIVING LIMITED**

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01  
INTRODUCTION

## 1.0 INTRODUCTION

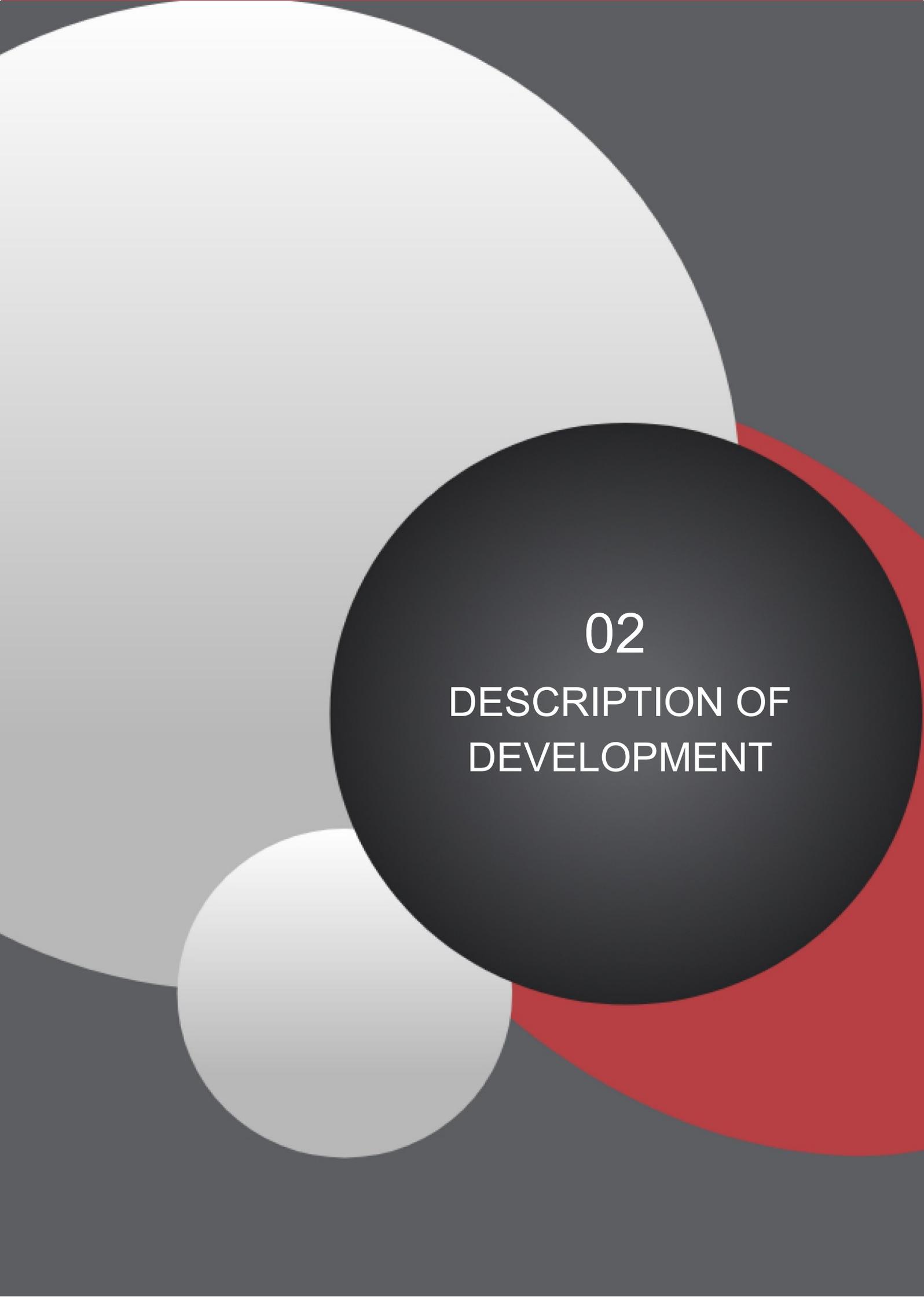
Aramark Property were instructed by Sandford Living Limited, to provide a Building Lifecycle Report for their proposed 'Build-to-Rent' and 'Build-to-Sell' residential scheme at Sandford Road, located at Milltown Park, Sandford Road, Dublin 6.

The purpose of this report is to provide an initial assessment of long-term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered to effectively manage and reduce costs for the benefit of the residents. This is achieved by producing a Building Lifecycle Report.

This Building Lifecycle Report has been developed on foot of the revised guidelines for Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities issued under Section 28 of the Planning and Development Act 2000 (as amended) December 2020. Within the new guidelines, new guidance is being provided on residential schemes.

Section 6.13 of the Operation and Management of Apartment Development Guidelines (December 2020) requires that:

“planning applications for apartment development shall include a building lifecycle report which in turn includes an assessment of long-term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.”



02

DESCRIPTION OF  
DEVELOPMENT

## 2.0 DESCRIPTION OF DEVELOPMENT

Sandford Living Limited intend to apply to An Bord Pleanála for permission for a strategic housing development at this c. 4.26 hectare site at Milltown Park, Sandford Road, Dublin 6, D06 V9K7. Works are also proposed on Milltown Road and Sandford Road to facilitate access to the development including improvements to pedestrian facilities on an area of c. 0.16 hectares. The development's surface water drainage network shall discharge from the site via a proposed 300mm diameter pipe along Milltown Road through the junction of Milltown Road / Sandford Road prior to outfalling to the existing drainage network on Eglinton Road (approximately 200 metres from the Sandford Road / Eglinton Road junction), with these works incorporating an area of c. 0.32 hectares. The development site area, road works and drainage works areas will provide a total application site area of c. 4.74 hectares.

The development will principally consist of: the demolition of c. 4,883.9 sq m of existing structures on site including Milltown Park House (880 sq m); Milltown Park House Rear Extension (2,031 sq m); the Finlay Wing (622 sq m); the Archive (1,240 sq m); the link building between Tabor House and Milltown Park House rear extension to the front of the Chapel (74.5 sq m); and 36.4 sq m of the 'red brick link building' (single storey over basement) towards the south-western boundary; the refurbishment and reuse of Tabor House (1,575 sq m) and the Chapel (768 sq m), and the provision of a single storey glass entrance lobby to the front and side of the Chapel; and the provision of a 671 No. unit residential development comprising 604 No. Build-to-Rent apartment and duplex units (88 No. studios, 262 No. one bed units, 242 No. two bed units and 12 No. three bed units) and 67 No. Build-to Sell apartment and duplex units (11 No. studios, 9 No. one bed units, 32 No. two bed units and 15 No. three bed units).

Block A1 will range in height from part 5 No. storeys to part 10 No. storeys and will comprise 94 No. Build-to-Rent apartments; Block A2 will range in height from part 6 No. storeys to part 8 No. storeys (including part double height at ground floor level) and will comprise 140 No. Build to-Rent apartments and duplex units; Block B will range in height from part 3 No. to part 7 No. storeys and will comprise 91 No. Build-to-Rent apartments; Block C will range in height from part 2 No. storeys to part 8 No. storeys (including part double height at ground floor level) and will comprise 163 No. Build-to-Rent apartments; Block D will range in height from 3 No. storeys to 5 No. storeys and will comprise 39 No. Build-to-Sell apartments; Block E will be 3 No. storeys in height and will comprise 28 No. Build-to-Sell duplex units and apartments; Block F will range in height from 5 No. storeys to part 7 No. storeys and will comprise 92 No. Build-to-Rent apartments; and the refurbished Tabor House (4 No. storeys including lower ground floor level) will comprise 24 No. Build-to-Rent apartments.

The development also includes a creche within Block F (400 sq m) with outdoor play area; and the provision of communal internal amenities (c. 1,248.8 sq m) and facilities (c. 158.3 sq m) throughout the residential blocks, Tabor House and the converted Chapel building including co-working space, gym, lounges, reading rooms, games room, multi-purpose space, concierge, mail rooms and staff facilities.

The proposed works also include a new 2.4 metre high boundary wall across the site from east to west (towards the southern boundary) requiring the demolition of a portion of the red brick link building that lies within the subject site towards the south-western boundary (36.4 sq m) and the making good of the façade at the boundary. The existing Link Building is the subject of a separate application for permission (DCC Reg. Ref. No. 3866/20) that includes a request for permission to demolish that Link Building, including the part of the building on the lands the subject of this application for SHD permission. If that application is granted and first implemented, no demolition works to the Link Building will be required under this application for SHD permission. If that application is refused permission or not first implemented, permission is here sought to demolish only that part of the Link Building now existing on the lands the subject of this application for permission and to make good the balance at the red line with a blank wall.

The development also provides a new access from Milltown Road (which will be the principal vehicular entrance to the site) in addition to utilising and upgrading the existing access from Sandford Road as a secondary access principally for deliveries, emergencies and taxis; new pedestrian access points; pedestrian/bicycle connections through the site; 344 No. car parking spaces (295 No. at basement level and 49 No. at surface level) which includes 18 No. mobility impaired spaces, 10 No. car share spaces, 4 No. collection/drop-off spaces and 2 No. taxi spaces; bicycle parking; 14 No. motorcycle spaces; bin storage; boundary treatments; private balconies and terraces facing all directions; external gantry access in sections of Blocks A1, A2 and C; hard and soft landscaping including public open space and communal open space (including upper level communal terraces in Block A1, Block B and Block C which will face all directions); sedum roofs; PV panels; substations; lighting; plant; lift cores; and all other associated site works above and below ground. The proposed development has a gross floor space of c. 54,871 sq m above ground level over a partial basement (under part of Block A1 and under Blocks A2, B and C) measuring c. 10,607 sq m, which includes parking spaces, bin storage, bike storage and plant.



03

EXECUTIVE SUMMARY

### **3.0 EXECUTIVE SUMMARY – BUILDING LIFE CYCLE REPORT**

#### **Measures to effectively manage and reduce costs for the benefit of residents**

The following document reviews the outline specification set out for the proposed 'Build-to-Rent' and 'Build-to-Sell' residential scheme at Sandford Road, located at Milltown Park, Sandford Road, Dublin 6 and explores the practical implementation of the design and material principles which has informed design of building roofs, façades, internal layouts and detailing of the proposed development.

Building materials proposed for use on elevations and in the public realm achieve a durable standard of quality that will not need regular fabric replacement or maintenance outside general day to day care. The choice of high quality and long-lasting materials, as well as both soft and hardscape in the public, semi-public and private realm will contribute to lower maintenance costs for future residents and occupiers.

Please note that detailed specifications of building fabric and services have not been provided at this stage. This report reflects the outline material descriptions contained within O'Mahony Pike Architects' planning drawings received.

For any elements where information was not available, typical examples have been provided of building materials and services used for schemes of this nature and their associated lifespans and maintenance requirements. All information is therefore indicative subject to further information at detailed design stage.

As the building design develops this document will be updated and a schedule will be generated from the items below detailing maintenance and replacement costs over the lifespan of the materials and development constituent parts in a summary document. This will enable a robust schedule of building component repair and replacement costs which will be available to the property management company so that running, and maintenance costs of the development are kept within the agreed Annual operational budget, this will take the form of a Planned Preventative Maintenance Schedule (PPM)\* at operational commencement of the development.

\*PPM under separate instruction



04

EXTERNAL BUILDING  
FABRIC SCHEDULE

## 4.0 EXTERNAL BUILDING FABRIC SCHEDULE

### 4.1 Roofing

#### 4.1.1 Roof Terraces

<i>Location</i>	Selected Communal Terraces
<i>Description</i>	<ul style="list-style-type: none"> <li>• Selected paving slabs on</li> <li>• Pedestal support system on</li> <li>• Bauder Capping sheet on</li> <li>• Bauder Underlayer on</li> <li>• Bauder PIR insulation (150mm thickness estimate) on</li> <li>• Bauder Vapour Control Layer on</li> <li>• Min 65mm screed laid to min. 1 in 80 falls on</li> <li>• Precast RC roof slab to engineer's detail.</li> </ul>
<i>Lifecycle</i>	Average lifecycle of 30 years. As used across the industry nationally and the UK, typically longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance visits to include inspection of drainage outlets under decking and removal of any blockages. General repair works, watching out for displacement of slabs, mortar decay and removal of organic matter.
<i>Year</i>	Quarterly
<i>Priority</i>	Medium
<i>Selection process</i>	Paving slabs provide a robust and long-lasting roof terrace surface, requiring considerably less maintenance.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

#### 4.1.2 Fall Arrest System for Roof Maintenance Access

<i>Location</i>	Flat roof areas to all blocks (maintenance access only)
<i>Description</i>	210 Guided Type Fall Protection System; Latchways ManSafe for Approved Bituminous Felt Membrane Roofing to various decks. Anchorage device: Latchways Constant Force™ post for Bituminous Felt Membrane. Installation in accordance with BS 7883 by the system manufacturer or a contractor approved by the system manufacturer.
<i>Lifecycle</i>	25-30 years dependent on quality of materials. Generally, steel finishes to skyward facing elements can be expected to maintain this life expectancy. As used across the industry nationally and the UK, long lifecycle is typically achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Check and reset tension on the line as per manufacturer's specifications. Check all hardware components for wear (shackles, eye bolts, turn buckles). Check elements for signs of wear and/or weathering. Lubricate all moving parts. Check for structural damage or modifications.
<i>Year</i>	Annually
<i>Priority</i>	High
<i>Selection process</i>	Fall protection systems are a standard life safety system, provided for safe maintenance of roofs and balconies where there is not adequate parapet protection. Fall protection systems must comply with relevant quality standards.
<i>Reference</i>	N/A

### 4.1.3 Roof Cowls

<i>Location</i>	Selected Flat Roof Areas
<i>Description</i>	Unitex Roof Cowl System WB160 for ducts from 125 to 160mm to be supplied with weather apron for flat roofs WA160. 50mm Dia. Stainless Steel goose neck tube to facilitate power supply to external roof level bolted to roof and weathered using proprietary Unitex weather apron.
<i>Lifecycle</i>	25-35 years. As used across the industry nationally and the UK, typically longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Check fixings annually, inspect for onset of leading-edge corrosion if epoxy powder coat finish and treat.
<i>Year</i>	Annually
<i>Priority</i>	Low
<i>Selection process</i>	Standard fitting for roof termination of mechanical ventilation system.
<i>Reference</i>	N/A

### 4.1.4 Flashings

<i>Location</i>	All flashing locations
<i>Description</i>	Code 5 lead to be used for all flashing and counter flashings.
<i>Lifecycle</i>	Typical life expectancy of 70 years recorded for lead flashings. Recessed joint sealing will require regular inspections. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Check joint fixings for lead flashing, ground survey annually and close-up inspection every 5 years. Re-secure as necessary.
<i>Year</i>	Ground level inspection annually and close-up inspection every 5 years
<i>Priority</i>	Medium
<i>Selection process</i>	Lead has longest life expectancy of comparable materials such as copper (60 years) and zinc (50 years). Lead is easily formed into the required shapes for effective weathering of building junctions according to standard Lead Sheet Association details.
<i>Reference</i>	N/A

## 4.2 Rainwater Drainage

<i>Location</i>	All buildings
<i>Description</i>	Gravity Rainwater Drainage System: <ul style="list-style-type: none"> <li>• Rainwater outlets: Wade or equally approved suitable for Bauder Roof membranes</li> <li>• Pipework: Cast Aluminium downpipes – ref. Alumasc or equally approved.</li> <li>• Below ground drainage: To Engineers' design and specification.</li> <li>• Disposal: To surface water drainage to Engineers' design.</li> <li>• Controls: To Engineers' design and specification.</li> <li>• <i>Accessories</i>: allow for outlet gradings, spigots, downspout nozzle, hopper heads, balcony and main roof outlets.</li> </ul>
<i>Lifecycle</i>	Metal gutters and downpipes have an expected life expectancy of 40 years in rural and suburban conditions (25 years in industrial and marine conditions), this is comparable to cast iron of 50 years and plastic, less so at 30 years. As used across the industry nationally and the UK, typically longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	As with roofing systems routine inspection is key to preserving the lifecycle of rainwater systems. Regular cleaning and rainwater heads and gutters, checking joints and fixings and regularly cleaning polyester coated surfaces (no caustic or abrasive materials).
<i>Year</i>	Annually, cleaning bi-annually
<i>Priority</i>	High
<i>Selection process</i>	As above, metal fittings compare well against cast iron (in terms of cost) and plastic (in terms of lifespan and aesthetic).
<i>Reference</i>	N/A

## 4.3 External Walls

### 4.3.1 Brick

<i>Location</i>	Façades
<i>Description</i>	Contrasting light and dark tone brickwork.
<i>Lifecycle</i>	Selected colour bricks have a high embodied energy, they are an extremely durable material. Brickwork in this application is expected to have a lifespan of 50-80 years. The mortar pointing however has a shorter lifespan of 25-50 years. Longer lifecycle achieved by regular inspection and maintenance regime.
<i>Required maintenance</i>	In general, given their durability, brickwork finishes require little maintenance. Most maintenance is preventative: checking for hairline cracks, deterioration of mortar, plant growth on walls, or other factors that could signal problems or lead to eventual damage.
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Aesthetic, lightweight, cost-efficient and low maintenance cladding option, indistinguishable from traditional brick construction.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

### 4.3.2 Metal Cladding

<i>Location</i>	Façades
<i>Description</i>	<ul style="list-style-type: none"> <li>• Vertical standing seam zinc metal cladding system.</li> <li>• PPC aluminium in RAL 7038 (Agate Grey).</li> <li>• Slim vertical coloured metal panels and profiles.</li> <li>• Insulated spandrel panels.</li> </ul>
<i>Lifecycle</i>	Lifespan expectancy generally in excess of 40 years. As used across the industry nationally and the UK, typically longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Selected cladding requires little maintenance and is resistant to corrosion. It can contribute to lower ongoing maintenance costs in comparison to exposed porous materials which may be liable to faster deterioration. Long term cleaning requirements should be taken into consideration.
<i>Year</i>	Inspection annually; cleaning 5 yearly
<i>Priority</i>	Low
<i>Selection process</i>	Selected cladding protects the building's structure from rainwater and weathering. Metal cladding systems are also chosen for their aesthetic impact, durability and weathering properties.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

### 4.3.3 Render

<i>Location</i>	Façades
<i>Description</i>	<ul style="list-style-type: none"> <li>• Weber-therm XM thin-coat acrylic finish render system.</li> <li>• Low maintenance plain finish sand/cement render coat at select locations.</li> </ul>
<i>Lifecycle</i>	Renders in general are expected to have a lifecycle of circa 25 years. Longer lifecycle achieved by regular inspection and maintenance regime.
<i>Required maintenance</i>	Regular inspections to check for cracking and de-bonding. Most maintenance is preventative. Coloured render requires less maintenance than traditional renders.
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	Appropriate detailing will contribute to a long lifespan for this installation. Insulated render is a durable and low-maintenance finish with the added benefit of this product being BBA certified against other render systems.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

#### 4.3.4 Concrete

<i>Location</i>	Façades
<i>Description</i>	<ul style="list-style-type: none"> <li>• Precast Concrete Colonnaded (Balcony) and Coping</li> <li>• Precast Concrete Frame and Horizontal Band</li> </ul>
<i>Lifecycle</i>	While concrete has a high embodied energy, it is an extremely durable material. Concrete frame has a typical life expectancy of 80 years. Longer lifecycle achieved by regular inspection and maintenance regime.
<i>Required maintenance</i>	In general concrete requires little maintenance. Most maintenance is preventative: checking for hairline cracks, vegetation growth on facades, or other factors that could signal problems or lead to eventual damage.
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Concrete is a durable product which is chosen for its structural properties, aesthetic, cost efficiency and rapid construction.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

#### 4.4 External Windows & Doors

<i>Location</i>	Façades
<i>Description</i>	<ul style="list-style-type: none"> <li>• Schüco thermally broken 'stick system' commercial window system.</li> <li>• Selected ALU-CLAD factory treated timber windows/ doors with external aluminium finish. All units to be double/triple-glazed with thermally broken frames.</li> <li>• All opening sections in windows to be fitted with suitable restrictors. Include for all necessary ironmongery; include for all pointing and mastic sealant as necessary; fixed using stainless steel metal straps screwed to masonry reveals; include for all bends, drips, flashings, thermal breaks etc.</li> </ul>
<i>Lifecycle</i>	Aluminium has a typical lifespan of 45-60 years in comparison to uPVC which has a typical lifespan of 30-40 years. Timber windows have a typical lifespan of 35-50 years, aluminium cladding can extend this lifespan by 10-15 years. As used nationwide and in the UK, typically longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Check surface of windows and doors regularly so that damage can be detected. Vertical mouldings can become worn and require more maintenance than other surface areas. Lubricate at least once a year. Ensure regular cleaning regime. Check for condensation on frame from window and ensure ventilation.
<i>Year</i>	Annual
<i>Priority</i>	Medium
<i>Selection process</i>	Aluminium is durable and low maintenance with an average lifespan of 45-60 years, exceeding uPVC (30-40 years). Alu-clad timber windows compare favorably when compared to the above, extending timber windows typical lifespan of 35-50 years by 10-15 years.
<i>Reference</i>	O'Mahony Pike Architects' drawings & design statement.

## 4.5 Balconies

### 4.5.1 Structure

<i>Location</i>	Façades
<i>Description</i>	<ul style="list-style-type: none"> <li>• Concrete balcony system to engineer's detail, or</li> <li>• Powder-coated steel frame balcony system to engineer's detail</li> <li>• Thermally broken farrat plate connections to main structure of building.</li> </ul>
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Metal structure has a typical life expectancy of 70 years dependent on maintenance of components.</li> <li>• Precast concrete structures have a high embodied energy; however, it is an extremely durable material. Concrete frame has a typical life expectancy of 80 years.</li> </ul> <p>As used across the industry nationally and the UK, longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.</p>
<i>Required maintenance</i>	Relatively low maintenance required. Check balcony system as per manufacturer's specifications. Check all hardware components for wear. Check elements for signs of wear and/or weathering. Check for structural damage or modifications.
<i>Year</i>	Annual
<i>Priority</i>	High
<i>Selection process</i>	Engineered detail; designed for strength and safety.
<i>Reference</i>	N/A

### 4.5.2 Balustrades and Handrails

<i>Location</i>	Balconies
<i>Description</i>	<ul style="list-style-type: none"> <li>• Frameless tempered glass (safety glass)</li> <li>• Glass supported on framing system positioned behind glass.</li> <li>• Approved toughened safety glass and steel including fixings in accordance with manufacturer's details.</li> </ul>
<i>Lifecycle</i>	General glass and metal items have a lifespan of 25-45 years. Longer lifecycle is achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Annual visual inspection of connection pieces for impact damage or alterations.
<i>Year</i>	Annual
<i>Priority</i>	High
<i>Selection process</i>	Metal and glass options will have a longer lifespan and require less maintenance than timber options (10-20 years).
<i>Reference</i>	N/A



05

INTERNAL BUILDING  
FABRIC SCHEDULE

## 5.0 INTERNAL BUILDING FABRIC SCHEDULE

### 5.1 Floors

#### 5.1.1 Common Areas

<i>Location</i>	Entrance lobbies / Common corridors
<i>Description</i>	<ul style="list-style-type: none"> <li>Selected anti-slip porcelain or ceramic floor tile complete with inset matwell.</li> <li>Selected loop pile carpet tiles.</li> </ul>
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>Lifespan expectation of 20-25 years in heavy wear areas, likely requirement to replace for modernisation within this period also.</li> <li>10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.</li> </ul>
<i>Required maintenance</i>	Visual inspection with regular cleaning, intermittent replacement of chipped / loose tiles
<i>Year</i>	<ul style="list-style-type: none"> <li>Annual for floor tiles.</li> <li>Quarterly inspection and cleaning of carpets as necessary</li> </ul>
<i>Priority</i>	Low
<i>Selection process</i>	Durable, low maintenance floor finish. Slip rating required at entrance lobby, few materials provide this and are as hard wearing. Using carpet allows flexibility to alter and change as fashions alter and change providing enhanced flexibility.
<i>Reference</i>	N/A

<i>Location</i>	Stairwells, landings / half landings
<i>Description</i>	Selected carpet covering. Approved anodised aluminium nosings to stairs.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.</li> <li>20-year lifespan for aluminium nosings.</li> </ul>
<i>Required maintenance</i>	Visual inspection with regular cleaning.
<i>Year</i>	Quarterly inspection and cleaning as necessary.
<i>Priority</i>	Low
<i>Selection process</i>	Using carpet allows flexibility to alter and change as fashions alter and change providing enhanced flexibility.
<i>Reference</i>	N/A

<i>Location</i>	Lift Lobbies
<i>Description</i>	Carpet/vinyl and porcelain tiles to match adjacent apartment common lobbies.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Lifespan expectation of 20-30 years in heavy wear areas, likely requirement to replace for modernisation within this period also.</li> <li>• 10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.</li> </ul>
<i>Required maintenance</i>	Visual inspection with regular cleaning, intermittent replacement of chipped / loose tiles.
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Slip rating required for lifts, few materials provide this and are as hard wearing. Using carpet allows flexibility to alter and change as fashions alter and change providing enhanced flexibility.
<i>Reference</i>	N/A

### 5.1.2 Tenant Amenity Areas

<i>Location</i>	Residential amenity (e.g. Concierge, creche)
<i>Description</i>	<ul style="list-style-type: none"> <li>• Timber laminate / parquet flooring, or</li> <li>• Carpet covering</li> <li>• Provide for inset matwell</li> </ul>
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Laminated / parquet timber flooring has an expected life expectancy of 25-35 years dependent on use</li> <li>• 10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also</li> </ul>
<i>Required maintenance</i>	Visual inspection. Sweep clean regularly ensuring to remove any dirt. Clean up spills immediately and use only recommended floor cleaners.
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Materials chosen for aesthetics, durability and low maintenance.
<i>Reference</i>	N/A

<i>Location</i>	All wet areas (e.g. Laundry, WC's)
<i>Description</i>	Selected anti-slip ceramic floor tile.
<i>Lifecycle</i>	Lifespan expectation of 20-25 years in heavy wear areas, likely requirement to replace for modernisation within this period also.
<i>Required maintenance</i>	Visual inspection, intermittent replacement of chipped / loose tiles.
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Slip rating required at entrance lobby, few materials provide this and are as hard wearing.
<i>Reference</i>	N/A

## 5.2 Walls

### 5.2.1 Common Areas

<i>Location</i>	Entrance lobbies / Corridors
<i>Description</i>	Selected paint finish with primer to skimmed plasterboard.
<i>Lifecycle</i>	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance required and replacement when damaged.
<i>Year</i>	Bi-annually
<i>Priority</i>	Low
<i>Selection process</i>	Decorative and durable finish.
<i>Reference</i>	N/A

<i>Location</i>	Lift cores / lobbies / corridors / stairs
<i>Description</i>	Selected paint finish with primer to skimmed plasterboard.
<i>Lifecycle</i>	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance required and replacement when damaged.
<i>Year</i>	Bi-annually
<i>Priority</i>	Low
<i>Selection process</i>	Decorative and durable finish.
<i>Reference</i>	N/A

### 5.2.2 Tenant Amenity Areas

<i>Location</i>	Residential Amenity (e.g. Concierge, creche)
<i>Description</i>	Selected paint finish with primer to skimmed plasterboard
<i>Lifecycle</i>	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance required and replacement when damaged.
<i>Year</i>	Bi-annually
<i>Priority</i>	Low
<i>Selection process</i>	Decorative and durable finish.
<i>Reference</i>	N/A

<i>Location</i>	Wet areas (e.g. Laundry, WC's)
<i>Description</i>	Selected ceramic wall tile to plasterboard (moisture board to wet areas).
<i>Lifecycle</i>	Typical life expectancy of 35-40 years, less in wet room areas to 20-25 years.
<i>Required maintenance</i>	Bi-annual inspection to review damage, local repairs as necessary, particular detailed inspection in wet room areas.
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	Wet room application requires moisture board and tiling.
<i>Reference</i>	N/A

### 5.3 Ceilings

<i>Location</i>	Common areas & tenant amenity areas
<i>Description</i>	Selected paint finish with primer to skimmed plasterboard ceiling on M/F frame. Acoustic ceiling to lift core and apartment lobbies. Moisture board to wet areas.
<i>Lifecycle</i>	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance required and replacement when damaged.
<i>Year</i>	Bi-annually
<i>Priority</i>	Low
<i>Selection process</i>	Decorative and durable finish
<i>Reference</i>	N/A

<i>Location</i>	Tenant amenity wet areas
<i>Description</i>	Selected paint finish with primer to skimmed moisture board ceiling.
<i>Lifecycle</i>	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular maintenance required and replacement when damaged.
<i>Year</i>	Bi-annually
<i>Priority</i>	Low
<i>Selection process</i>	Decorative and durable finish.
<i>Reference</i>	N/A

## 5.4 Internal Handrails & Balustrades

<i>Location</i>	Stairs & landings
<i>Description</i>	Mild steel painted balustrade and handrail.
<i>Lifecycle</i>	Over 40 years typical lifecycle. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	Regular inspections of holding down bolts and joints
<i>Year</i>	Annually
<i>Priority</i>	High
<i>Selection process</i>	Hard-wearing long-life materials against timber options
<i>Reference</i>	N/A

## 5.5 Carpentry & Joinery

### 5.5.1 Internal Doors and Frames

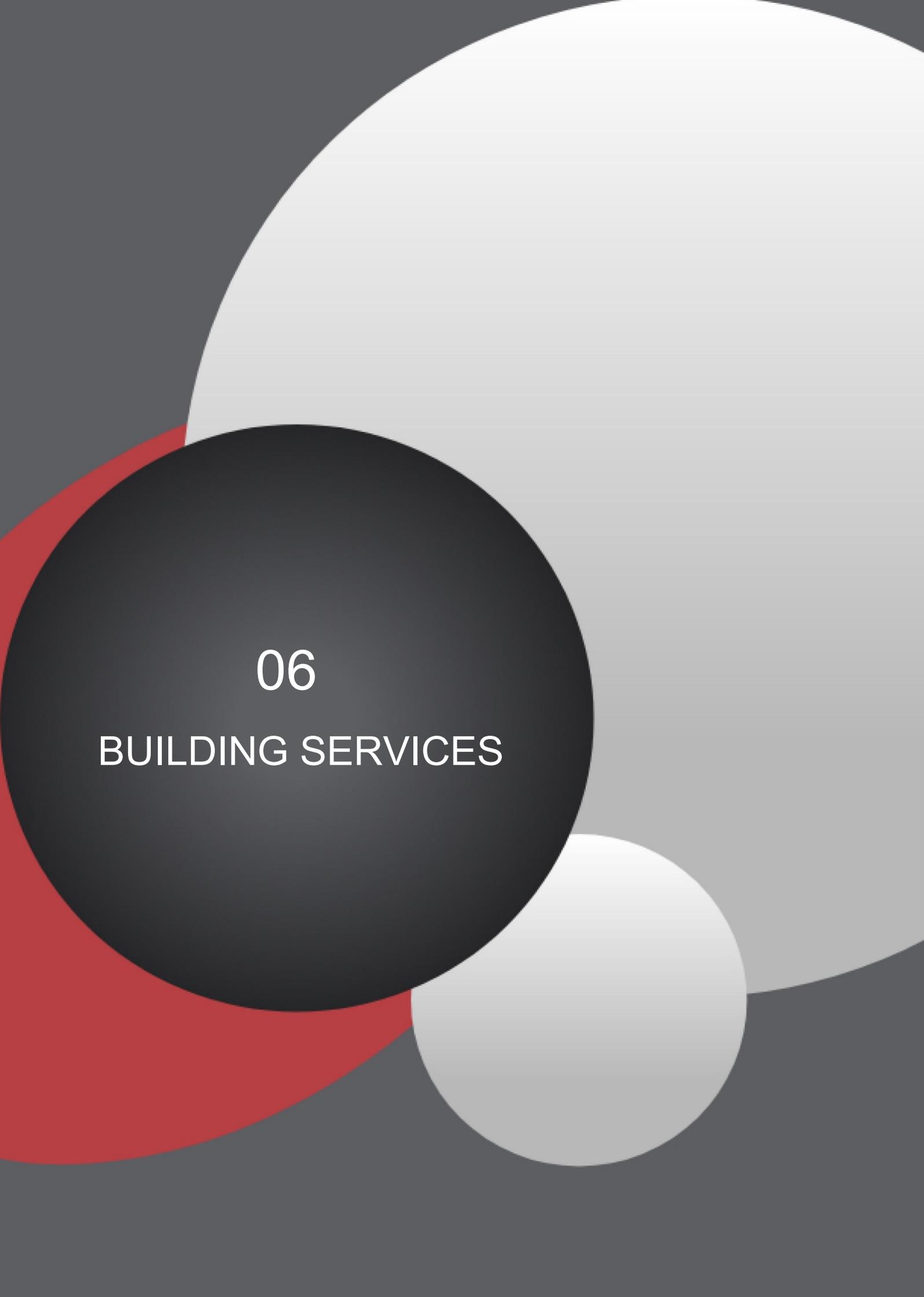
<i>Location</i>	All buildings
<i>Description</i>	<ul style="list-style-type: none"> <li>Selected white primed and painted/varnished solid internal doors, or hardwood veneered internal doors</li> <li>All fire rated doors and joinery items to be manufactured in accordance with B.S. 476. Timber saddle boards.</li> <li>Brushed aluminium door ironmongery or similar</li> </ul>
<i>Lifecycle</i>	30 years average expected lifespan. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	General maintenance in relation to impact damage and general wear and tear
<i>Year</i>	Annual
<i>Priority</i>	Low, unless fire door High
<i>Selection process</i>	Industry standard
<i>Reference</i>	N/A

### 5.5.2 Skirtings & Architraves

<i>Location</i>	All buildings
<i>Description</i>	Painted timber/MDF skirtings and architraves
<i>Lifecycle</i>	30 years average expected lifespan. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
<i>Required maintenance</i>	General maintenance in relation to impact damage and general wear and tear
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Industry standard
<i>Reference</i>	N/A

### 5.5.3 Window Boards

<i>Location</i>	All Buildings
<i>Description</i>	Painted timber/MDF window boards
<i>Lifecycle</i>	30 years average expected lifespan
<i>Required maintenance</i>	General maintenance in relation to impact damage and general wear and tear
<i>Year</i>	Annual
<i>Priority</i>	Low
<i>Selection process</i>	Industry standard
<i>Reference</i>	N/A



06

BUILDING SERVICES

## 6.0 BUILDING SERVICES

### 6.1 Mechanical Systems

#### 6.1.1 Mechanical Plant

<i>Location</i>	Residential
<i>Description</i>	Water Heating plant is proposed to consist of Exhaust Air Source Heat Pumps, with supplementary immersion heaters. Further details to be provided by the M&E Consultant at detailed design stage.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual Maintenance / Inspection to Heating System</li> <li>• Annual Maintenance of Exhaust Air Source Heat Pumps</li> <li>• Annual Maintenance / Inspection to Heating and Water Pumps.</li> <li>• Annual Maintenance / Inspection to Water Tanks.</li> <li>• Annual Maintenance / Inspection to Water Booster - sets.</li> <li>• Annual Maintenance / Inspection to DHS Tanks.</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> <li>• Replacement of equipment at (End of Life) EOL to be determined at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual Service Inspections to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A

#### 6.1.2 Soils and Wastes

<i>Location</i>	All Areas / Kitchens / Bathrooms etc
<i>Description</i>	Soils and Wastes Pipework – uPVC above basement and HDPE in basement.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual inspections required for all pipework within landlord areas.</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual Service Inspections to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A

### 6.1.3 Water Services

<i>Location</i>	Apartments
<i>Description</i>	Exhaust Air Heat Pump (EAHP) <ul style="list-style-type: none"> <li>The water services installation in the Landlord basement and core areas will be copper.</li> <li>Within the apartments, the water services installation will be completed using a Pre-Insulated Multi Layered Alu-Plex type system.</li> </ul>
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>Annual Inspection of EAHP.</li> <li>Annual inspections required for all pipework within landlord areas.</li> <li>Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual Inspections, including legionella testing to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	High
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A

### 6.1.4 Ventilation Services

<i>Location</i>	Apartments
<i>Description</i>	Exhaust Air Heat Pump <ul style="list-style-type: none"> <li>Continuous mechanical extract system in apartments.</li> </ul>
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>Annual inspection of extract fan / and grilles</li> <li>Annual Inspection of operation of fan and boost / setback facility if provided on units.</li> <li>Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual Service Inspections to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A

## 6.2 Electrical / Protective Services

### 6.2.1 Electrical Infrastructure

<i>Location</i>	Switch rooms / Risers
<i>Description</i>	Maintenance of Electrical Switchgear
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual Inspection of Electrical Switchgear and switchboards.</li> <li>• Thermographic imaging of switchgear 50% of MV Switchgear Annually and LV switchgear every 3 years.</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual / Every three years to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	High
<i>Selection process</i>	All equipment to meet and exceed ESB, IS10101:2020, CIBSE recommendations and be code compliant in all cases.
<i>Reference</i>	N/A

### 6.2.2 Lighting Services internal

<i>Location</i>	All Areas – Internal
<i>Description</i>	Lighting – LED throughout with Presence detection in circulation areas and locally controlled in apartments.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual Inspection of All Luminaires</li> <li>• Quarterly Inspection of Emergency Lighting.</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual / Quarterly Inspections certification as required per above remedial works.
<i>Year</i>	Annually / Quarterly
<i>Priority</i>	High
<i>Selection process</i>	All equipment to meet requirements and be in accordance with the current IS3217:2013 + A1 2017, Part M and DAC Requirements.
<i>Reference</i>	N/A

### 6.2.3 Lighting Services External

<i>Location</i>	All Areas – Internal
<i>Description</i>	Lighting – All LED with Vandal Resistant Diffusers where exposed.
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual Inspection of All Luminaires</li> <li>• Quarterly Inspection of Emergency Lighting</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual / Quarterly Inspections certification as required as per the PPM schedule.
<i>Year</i>	Annually / Quarterly
<i>Priority</i>	High
<i>Selection process</i>	All equipment to meet requirements and be in accordance with the current IS3217:2013 + A1 2017, Part M and DAC Requirements.
<i>Reference</i>	N/A

#### 6.2.4 Protective Services – Fire Alarm

<i>Location</i>	All areas – Internal
<i>Description</i>	Fire alarm
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>Quarterly Inspection of panels and 25% testing of devices as per IS3218:2013 + A1 2019 requirements.</li> <li>Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual / Quarterly Inspections certification as required as per the PPM schedule.
<i>Year</i>	Annually / Quarterly
<i>Priority</i>	High
<i>Selection process</i>	All equipment to meet requirements and be in accordance with the current IS3218:2013 + A1 2019 and the Fire Cert
<i>Reference</i>	N/A

#### 6.2.5 Protective Services – Fire Extinguishers

<i>Location</i>	All Areas – Internal
<i>Description</i>	Fire Extinguishers and Fire Blankets
<i>Lifecycle</i>	Annual Inspection
<i>Required maintenance</i>	Annual with Replacement of all extinguishers at year 10
<i>Year</i>	Annually
<i>Priority</i>	Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
<i>Selection process</i>	All fire extinguishers must meet the requirements of I.S 291:2015 Selection, commissioning, installation, inspection and maintenance of portable fire extinguishers.
<i>Reference</i>	N/A

#### 6.2.6 Protective Services – Apartment Sprinkler System (Where Applicable by Fire Cert)

<i>Location</i>	Apartments only.
<i>Description</i>	Apartment Sprinkler System
<i>Lifecycle</i>	Weekly / Annual Inspection
<i>Required maintenance</i>	Weekly Check of Sprinkler Pumps and plant and annual testing and certification of plant by specialist.
<i>Year</i>	All
<i>Priority</i>	Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
<i>Selection process</i>	The Apartment sprinkler system shall be installed in accordance with BS 9251:2005 – Sprinkler Systems for Residential and Domestic Occupancies – Code of Practice
<i>Reference</i>	N/A

### 6.2.7 Protective Services – Dry Risers

<i>Location</i>	Common Area Cores of apartments
<i>Description</i>	Dry Risers
<i>Lifecycle</i>	Weekly / Annual Inspection
<i>Required maintenance</i>	Visual Weekly Checks of Pipework and Landing Valves with Annual testing and certification by specialist.
<i>Year</i>	Annually
<i>Priority</i>	Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
<i>Selection process</i>	The system shall be installed in accordance with BS 5041 & BS 9999
<i>Reference</i>	N/A

### 6.2.8 Fire Fighting Lobby Ventilation (To Fire Consultants Design and Specification)

<i>Location</i>	Common Area Lobbies
<i>Description</i>	Smoke Extract / Exhaust Systems
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Regular Tests of the system</li> <li>• Annual inspection of Fans</li> <li>• Annual inspection of automatic doors and AVOs</li> <li>• All systems to be backed up by life safety systems.</li> </ul>
<i>Required maintenance</i>	Annual Service Inspections to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Weekly / Annually
<i>Priority</i>	Medium
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A

### 6.2.9 Sustainable Services

<i>Location</i>	Apartment
<i>Description</i>	Heat Pump
<i>Lifecycle</i>	<ul style="list-style-type: none"> <li>• Annual Maintenance of Exhaust Air Source Heat Pumps</li> <li>• Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.</li> </ul>
<i>Required maintenance</i>	Annual Service Inspections to be included as part of Development Planned Preventative Maintenance Programme
<i>Year</i>	Annually
<i>Priority</i>	Medium
<i>Selection process</i>	All equipment to be detailed as part of the detailed design section of the development. This equipment will be selected in conjunction with the design and management team to meet and exceed the CIBSE recommended lifecycles.
<i>Reference</i>	N/A



07

CONCLUSION &  
CONTACT DETAILS

## 7.0 CONCLUSION & CONTACT DETAILS

Based on the information provided, Aramark Property have considered the schemes proposals. From our experience to date of similar schemes we manage, we have set out an overview of how we believe the overarching management of the scheme can be successfully managed in best practice for the benefit of the owners of this scheme, the future occupiers, and the wider community.

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### Aramark Key Service Lines



## DOCUMENT CONTROL SHEET

<b>Client:</b>	SANDFORD LIVING LIMITED
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