BUILDING LIFECYCLE REPORT

PROPOSED DEVELOPMENT: CLOGHROE SHD COOLFLUGH, CLOGHROE, TOWER, CO. CORK

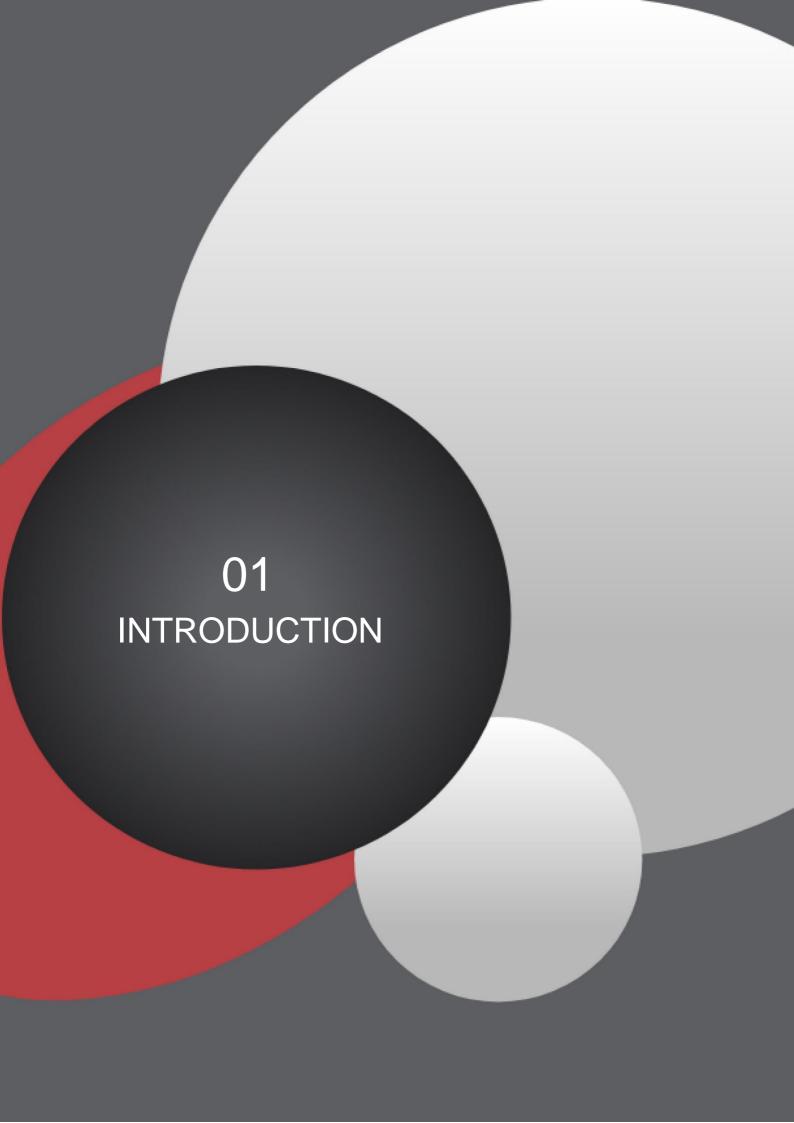


CLIENT:
CLOGHROE
DEVELOPMENT
LIMITED



TABLE OF CONTENTS

1.0	INTRODUCTION	4
2.0	DESCRIPTION OF DEVELOPMENT	6
3.0	EXECUTIVE SUMMARY – BUILDING LIFE CYCLE REPORT	8
4.0	EXTERNAL BUILDING FABRIC SCHEDULE	10
4.1	Roofing	10
4.2	Rainwater Drainage	12
4.3	External Walls	12
4.4	External Windows & Doors	14
4.5	Balconies	15
5.0	INTERNAL BUILDING FABRIC SCHEDULE	18
5.1	Floors	18
5.2	Walls	19
5.3	Ceilings	20
5.4	Internal Handrails & Balustrades	20
5.5	Carpentry & Joinery	20
6.0	BUILDING SERVICES	23
6.1	Mechanical Systems	23
6.2	Electrical / Protective Services	26
7.0	CONCLUSION & CONTACT DETAILS	30
	DOCUMENT CONTROL SHEET	31



1.0 INTRODUCTION

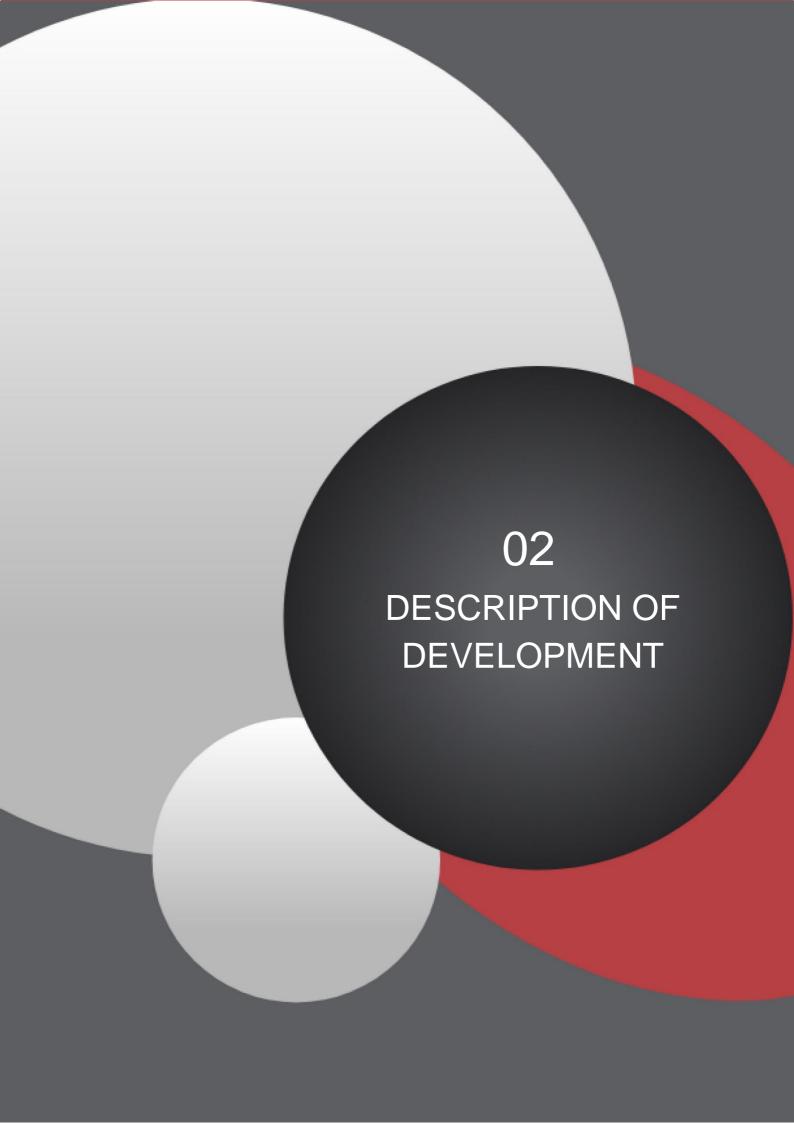
Aramark Property were instructed by Cloghroe Development Limited, to provide a Building Lifecycle Report for their proposed mixed-use development consisting of mixed-use residential and retail development at Coolflugh, Cloghroe, Tower, Co. Cork.

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."



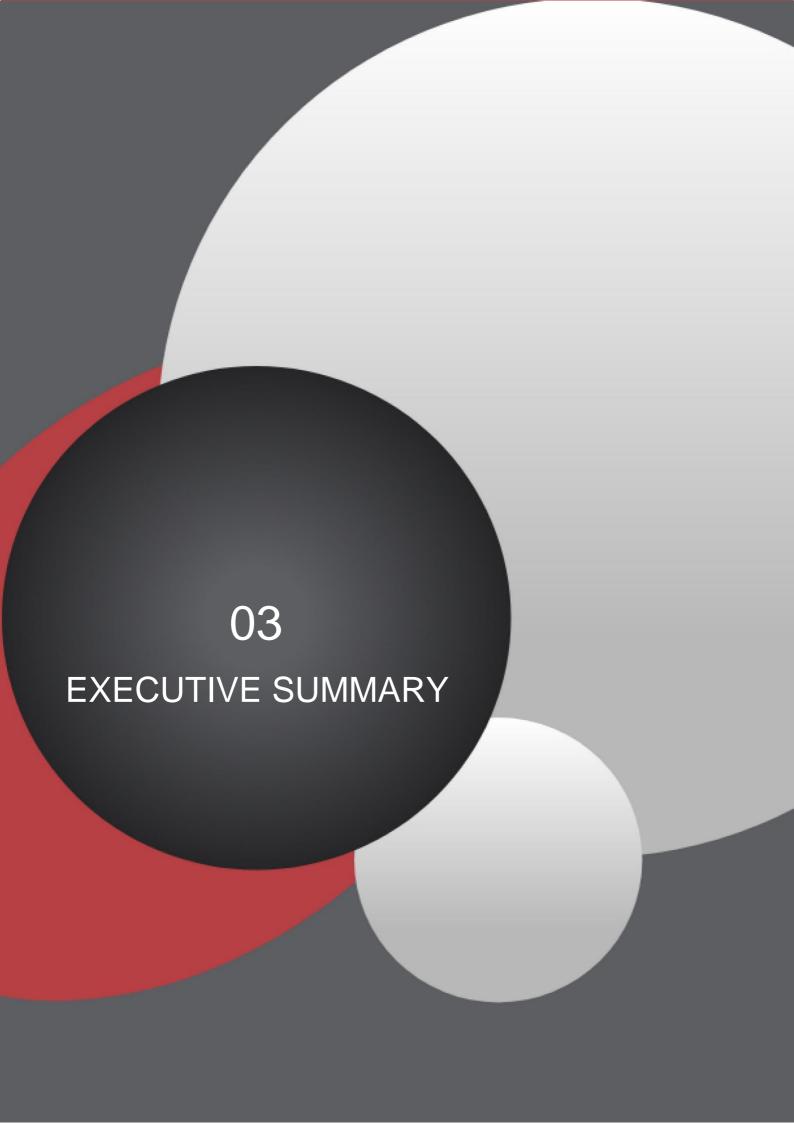
2.0 DESCRIPTION OF DEVELOPMENT

The mixed-use development will principally consist of:

The construction of a mixed-use residential and retail development and all ancillary site development works, including the demolition of 2 no. existing agricultural structures at Coolflugh, Cloghroe, Tower, Cork. The proposed residential development comprises the construction of 198 no. residential units, two storey creche, two storey café building and single storey retail food store. The proposed development provides for 117 no. dwelling houses consisting of 5 no. 4 bedroom detached houses, 44 no. 4 bedroom semi-detached houses, 8 no. 4 bedroom townhouses, 14 no. 3 bedroom semi-detached houses, 24 no. 3 bedroom townhouses and 22 no. 2 bedroom townhouses. The proposed development includes 81 no. apartment/duplex units consisting of 2 no. 3 bedroom, 35 no. 2 bedroom and 44 no. 1 bedroom units. 79 no. of the proposed apartment/duplex units will be provided in 6 no. 3 storey apartment buildings with ancillary communal areas and bicycle parking facilities. 2 no. apartment units will be provided at first floor level of a proposed café building to the south of the site.

The proposed retail development consists of a single storey retail food store with a net sales area of 1,315 m2 (which includes the sale of alcohol for consumption off premises) with ancillary signage, surface car park, servicing areas and bicycle parking facilities. The proposed development includes a proposed two storey café building with café on ground floor and 2 no. apartments at first floor level.

Access to the proposed development will be via 2 no. entrances from the R617, one which will serve the proposed residential development and one to serve the proposed retail development. A separate pedestrian entrance is to be provided from the existing cul-de-sac to the north east of the site. The proposed development makes provision for the upgrade of the R617, including the installation of footpath/cycle infrastructure, signalised pedestrian crossing and the relocation of the existing public bus stop to the west of the R617. Ancillary site development works include flood defence works, public realm upgrades, amenity walks, public open spaces and an urban plaza to the east of the proposed retail unit.



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 mixed-use development consisting of mixed-use residential and retail development at Coolflugh, Cloghroe, Tower, Co. Cork 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 Deady Gahan 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



4.0 EXTERNAL BUILDING FABRIC SCHEDULE

4.1 Roofing

4.1.1 Roof (Manufacturer / Supplier TBC)

Location	Selected Flat Roof Areas (maintenance access only)
Description	Kingspan Thermaroof built up roof to engineer's specification.
Lifecycle	Average lifecycle of 15-25 years on most membrane roofs. Lifecycle will
	be extended with robust proven detailing to adjoining roof elements and
	appropriate and regular maintenance to ensure the upkeep of roofing
	product / materials.
Required	Half-yearly maintenance visits to include inspection of membrane
maintenance	material for puncture / cracks on sheeting; seams and flashing details;
	around drainage and ventilation outlets and removal of any
	vegetation/moss blockages to prevent ponding.
Year	Half-Yearly / Annual
Priority	Medium
Selection	A membrane roof with appropriate built-up system will provide durability,
process	lacks water permeability, and easily maintain without shutting down
	building operations during application.
Reference	Deady Gahan Architects' planning drawings & design statement.

4.1.2 Pitched Roofs (Manufacturer / Supplier TBC)

Location	Townhouses
Description	Contrasting Concrete Tiled Roof.
Lifecycle	Lifecycle of 80 -100 years for concrete tiled roofs. As used across the industry nationally and in the UK, long lifecycle typically achieved by regular inspection and maintenance regime to ensure the upkeep of roofing tiles.
Required	Annual inspection internally and externally for slipped/cracked tiles,
maintenance	slates and flashings, leaks etc. Carry out localised repairs as required.
Year	Annual
Priority	Medium
Selection	Concrete tiles are chosen for its aesthetic qualities and are durable and
process	long-lasting materials which few other roofing materials can achieve.
	Pitched roofs by design ensure run-off of rainwater and therefore, less
	deterioration to roofing materials.
Reference	Deady Gahan Architects' planning drawings & design statement.

4.1.3 Fall Arrest System for Roof Maintenance Access (Manufacturer / Supplier TBC)

Location	Flat Roof Areas (maintenance access only)
Description	Fall Protection System on approved anchorage device.
	Installation in accordance with BS 7883 by the system manufacturer
	or a contractor approved by the system manufacturer.
Lifecycle	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.
Required maintenance	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.
Year	Annually
Priority	High
Selection process	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.
Reference	N/A

4.1.4 Roof Cowls (Manufacturer / Supplier TBC)

Location	Selected Flat Roof Areas
Description	Roof Cowl System to be supplied with weather apron for flat roofs.
Lifecycle	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.
Required maintenance	Check fixings annually, inspect for onset of leading-edge corrosion if epoxy powder coat finish and treat.
Year	Annually
Priority	Low
Selection process	Standard fitting for roof termination of mechanical ventilation system.
Reference	N/A

4.1.5 Flashings (Manufacturer / Supplier TBC)

Location	All flashing locations
Description	Lead to be used for all flashing and counter flashings.
Lifecycle	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.
Required maintenance	Check joint fixings for lead flashing, ground survey annually and close-up inspection every 5 years. Re-secure as necessary.
Year	Ground level inspection annually and close-up inspection every 5 years
Priority	Medium
Selection process	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.
Reference	N/A



4.2 Rainwater Drainage (Manufacturer / Supplier TBC)

Location	All buildings
Description	 Rainwater outlets: Wade or equally approved suitable for specified roof membranes. Pipework: Mixture of new cast aluminium and new uPVC to Engineer's design and specification. Below ground drainage: To Engineers design and specification. Disposal: To surface water drainage to Engineer's design. Controls: To Engineer's design and specification. Accessories: allow for outlet gradings, spigots, downspout nozzle, hopper heads, balcony and main roof outlets.
Lifecycle	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.
Required maintenance	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).
Year	Annually, cleaning bi-annually
Priority	High
Selection process	As above, metal fittings compare well against cast iron (in terms of cost) and plastic (in terms of lifespan and aesthetic).
Reference	N/A

4.3 External Walls

4.3.1 **Brick** (Manufacturer / Supplier TBC)

Location	Façades
Description	Contrasting light and dark tone brickwork.
Lifecycle	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.
Required maintenance	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.
Year	Annual
Priority	Low
Selection process	Aesthetic, lightweight, cost-efficient and low maintenance cladding option, indistinguishable from traditional brick construction.
Reference	Deady Gahan Architects' drawings & design statement.



4.3.2 Metal Cladding (Manufacturer / Supplier TBC)

Location	Façades
Description	 Selected colour PPC aluminium cladding system to wall and canopy projection feature (Townhouse Entrances). PPC aluminium capping on galvanised metal straps (Parapet and Balcony).
Lifecycle	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.
Required maintenance	Selected cladding and material require 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.
Year	Inspection annually; cleaning 5 yearly
Priority	Low
Selection process	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.
Reference	Deady Gahan Architects' planning drawings & design statement.

4.3.3 Render (Manufacturer / Supplier TBC)

Location	Façades – All Buildings
Description	Contrasting Natural Render Finish
Lifecycle	Renders in general are expected to have a lifecycle of circa 25 years.
	Longer lifecycle achieved by regular inspection and maintenance
	regime.
Required	Regular inspections to check for cracking and de-bonding. Most
maintenance	maintenance is preventative. Coloured render requires less
	maintenance than traditional renders.
Year	Annually
Priority	Medium
Selection	Appropriate detailing will contribute to a long lifespan for this installation.
process	Insulated render is a durable and low-maintenance finish with the added
	benefit of this product being BBA certified against other render systems.
Reference	Deady Gahan Architects' planning drawings & design statement.



4.3.4 Stone Cladding (Manufacturer / Supplier TBC)

Location	Façades
Description	Natural Stone Cladding with stainless steel fixing system on rigid insulation layer with waterproof layer on concrete blockwork/reinforced concrete inner leaf.
Lifecycle	Stone cladding is expected to have a lifespan in the region of 40-60 years. As used across the industry nationally and the UK, longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
Required maintenance	In general, given its durability, stone requires little maintenance and weathers well. 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.
Year	Annual
Priority	Low
Selection process	Stone is a natural and highly durable material offering a robust aesthetic. Options for stone cladding include reconstituted stone which is a cost-effective and adaptable cladding option when compared to natural stone cladding. It has the high durability associated with natural stone, with similar mechanical properties to precast concrete.
Reference	Deady Gahan Architects' planning drawings & design statement.

4.4 External Windows & Doors (Manufacturer / Supplier TBC)

Location	Façades
Description	 Selected uPVC window and door frames to approved colour. All units to be double-glazed with thermally efficient framework. 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.
Lifecycle	uPVC has a typical lifespan of 30-40 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.
Required	Check surface of windows and doors regularly so that damage can be
maintenance	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.
Year	Annual
Priority	Medium
Selection	uPVC is durable, energy efficient, sound-proof, resistant to corrosion
process	and require low maintenance.
Reference	Deady Gahan Architects' planning drawings & design statement.



Location	Façades – Commercial Unit
Description	 Full height, powder coated clear glazed curtain walling system. Retail unit to be double-glazed with thermally efficient frames.
	 Any opening sections in panels 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.
Lifecycle	PCC aluminium has a typical lifespan of up to 45 years. Longer lifecycle
	can be achieved by regular inspection and maintenance regime as per
	manufacturer's recommendation.
Required	Check surface of windows and doors regularly so that damage can be
maintenance	detected. Lubricate at least once a year. Ensure regular cleaning
	regime. Check for condensation on frame from window and ensure ventilation.
Year	Annual
Priority	Medium
Selection	PPC aluminium is durable, resistant to corrosion, energy efficient and
process	require low maintenance.
Reference	N/A

4.5 Balconies

4.5.1 Structure

Location	Façades – Duplex and Apartments
Description	 Cantilevered and recessed precast concrete balcony system to engineer's details. 'Concrete to concrete connectors' to main structure of building to engineer's detail.
Lifecycle	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. 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.
Required maintenance	Relatively low maintenance required. Check balcony system as per manufacturer's specifications. Check elements for signs of wear and/or weathering. Check for structural damage or modifications.
Year	Annual
Priority	High
Selection process	Engineered detail; designed for strength and safety.
Reference	N/A



4.5.2 Balustrades and Handrails

Location	Balconies – Duplex and Apartments
Description	 Anthracite-Grey vertical balustrades and railings Fixings in accordance with manufacturer's details.
Lifecycle	Generally 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.
Required maintenance	Annual visual inspection of connection pieces for impact damage or alterations.
Year	Annual
Priority	High
Selection process	Metal option will have a longer lifespan and require less maintenance than timber options (10-20 years).
Reference	N/A



5 INTERNAL BUILDING FABRIC SCHEDULE

5.1 Floors

5.1.1 Common Areas

Location	Apartment – Entrance lobbies / Common corridors
Description	Selected anti-slip porcelain or ceramic floor tile complete with inset matwell. Selected least rile segret tiles.
	Selected loop pile carpet tiles.
Lifecycle	 Lifespan expectation of 20-25 years in heavy wear areas, likely requirement to replace for modernisation within this period also.
	 10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.
Required	Visual inspection with regular cleaning, intermittent replacement of
maintenance	chipped / loose tiles
Year	Annual for floor tiles.
	Quarterly inspection and cleaning of carpets as necessary
Priority	Low
Selection	Durable, low maintenance floor finish. Slip rating required at entrance
process	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.
Reference	N/A

Location	Apartment – Stairwells, landings / half landings
Description	Selected carpet covering. Approved anodised aluminium nosings to
	stairs.
Lifecycle	 10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.
	20-year lifespan for aluminium nosings.
Required	Visual inspection with regular cleaning.
maintenance	
Year	Quarterly inspection and cleaning as necessary.
Priority	Low
Selection	Using carpet allows flexibility to alter and change as fashions alter and
process	change providing enhanced flexibility.
Reference	N/A

Location	Apartment – Lift Lobbies
Description	Carpet/vinyl and porcelain tiles to match adjacent apartment common
	lobbies.
Lifecycle	 Lifespan expectation of 20-30 years in heavy wear areas, likely requirement to replace for modernisation within this period also. 10-15 year lifespan for carpet. Likely requirement to replace for modernisation within this period also.
Required	Visual inspection with regular cleaning, intermittent replacement of
maintenance	chipped / loose tiles.
Year	Annual
Priority	Low
Selection	Slip rating required for lifts, few materials provide this and are as hard
process	wearing. Using carpet allows flexibility to alter and change as fashions
	alter and change providing enhanced flexibility.
Reference	N/A

5.2 Walls

5.2.4 Common Areas

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

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



5.3 Ceilings

Location	Apartment – Common areas
Description	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.
Lifecycle	2-10 years for finishes; 40 years for plasterboard. Longer lifecycle
	achieved by regular inspection and maintenance regime to ensure the
	upkeep of materials.
Required	Regular maintenance required and replacement when damaged.
maintenance	
Year	Bi-annually
Priority	Low
Selection	Decorative and durable finish
process	
Reference	N/A

5.4 Internal Handrails & Balustrades

Location	Apartment – Stairs & landings
Description	Metal balustrade option
Lifecycle	25-30 years typical lifecycle. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
Required	Regular inspections of holding down bolts and joints
maintenance	
Year	Annually
Priority	High
Selection	Hard-wearing long-life materials against timber options
process	
Reference	N/A

5.5 Carpentry & Joinery

5.5.1 Internal Doors and Frames

Location	Apartment – Common Areas
Description	 Selected white primed and painted/varnished solid internal doors, or hardwood veneered internal doors All fire rated doors and joinery items to be manufactured in accordance with B.S. 476. Timber saddle boards. Brushed aluminium door ironmongery or similar
Lifecycle	30 years average expected lifespan. Longer lifecycle achieved by regular inspection and maintenance regime to ensure the upkeep of materials.
Required	General maintenance in relation to impact damage and general wear
maintenance	and tear
Year	Annual
Priority	Low, unless fire door High
Selection	Industry standard
process	
Reference	N/A



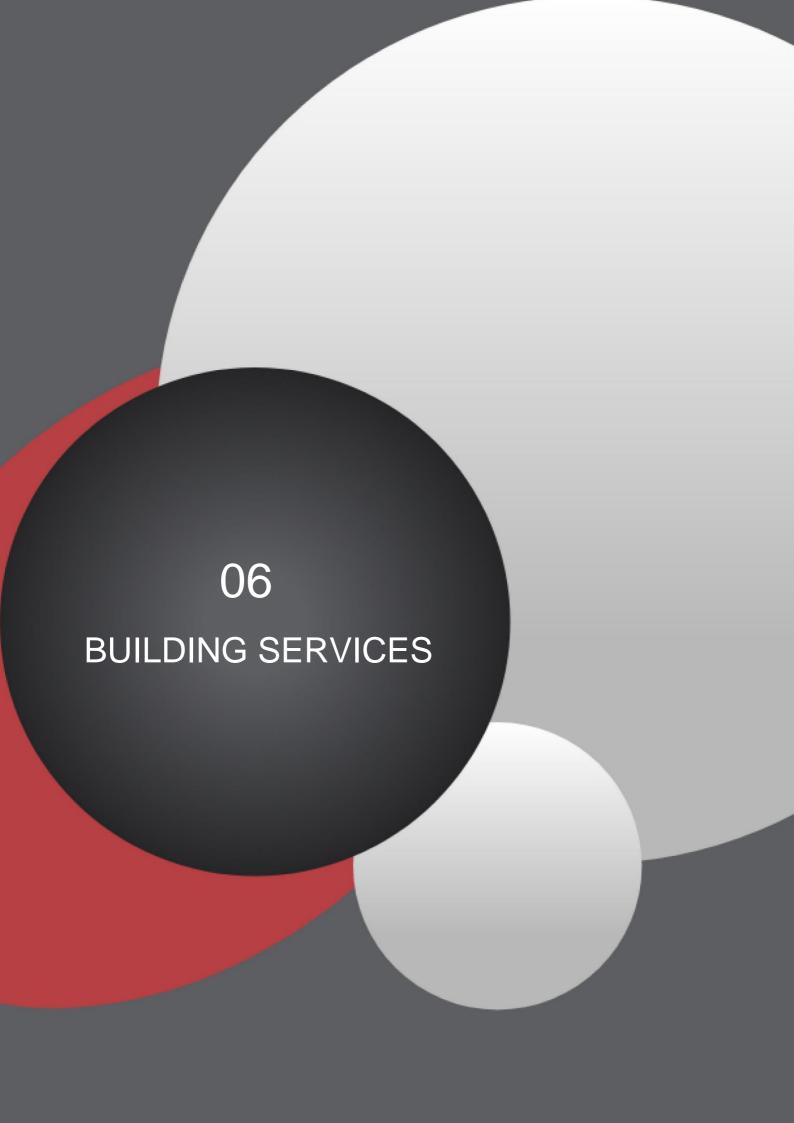
5.5.2 **Skirtings & Architraves**

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

5.5.3 Window Boards

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





6.0 BUILDING SERVICES

6.1 Mechanical Systems

6.1.1 Mechanical Plant Apartments

Location	Apartment Plant Area
Description	Water Heating plant is proposed to consist primarily of Exhaust Air Heat Pumps with back up heater. Full specification to be further details to be provided by the M&E Consultant at detailed design stage.
Lifecycle	 Annual Maintenance Exhaust Air Heat Pump and Hot Water Heat Pump Annual Maintenance / Inspection to Pumps. Annual Maintenance / Inspection to Water Tanks. Annual Maintenance / Inspection to Water Booster - sets. Annual Maintenance / Inspection to DHS Tanks. Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage. Replacement of equipment at (End of Life) EOL to be determined at detailed design stage.
Required	Annual Service Inspections to be included as part of Development
maintenance	Planned Preventative Maintenance Programme
Year	Annually
Priority	Medium
Selection	All equipment to be detailed as part of the detailed design section of the
process	development. This equipment will be selected in conjunction with the
	design and management team to meet and exceed the CIBSE
	recommended lifecycles.
Reference	N/A

6.1.2 Mechanical Plant Houses / Duplexes

Location	Duplex Plant Area
Description	Water Heating plant is proposed to consist primarily of Exhaust Air Heat Pumps with back up heater. Full specification to be further details to be provided by the M&E Consultant at detailed design stage.
Lifecycle	 Annual Maintenance Exhaust Air Heat Pump and Hot Water Heat Pump Annual Maintenance / Inspection to Pumps. Annual Maintenance / Inspection to Water Tanks. Annual Maintenance / Inspection to Water Booster - sets. Annual Maintenance / Inspection to DHS Tanks. Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage. Replacement of equipment at (End of Life) EOL to be determined at detailed design stage.
Required	Annual Service Inspections to be included as part of Development
maintenance	Planned Preventative Maintenance Programme
Year	Annually



Priority	Medium
Selection	All equipment to be detailed as part of the detailed design section of the
process	development. This equipment will be selected in conjunction with the
	design and management team to meet and exceed the CIBSE
	recommended lifecycles.
Reference	N/A

6.1.3 Soils and Wastes - All Unit Types

Location	All Areas
Description	PVC Soils and Wastes Pipework
Lifecycle	 Annual inspections required for all pipework within landlord areas. Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
Required	Annual Service Inspections to be included as part of Development
maintenance	Planned Preventative Maintenance Programme
Year	Annually
Priority	Medium
Selection process	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.
Reference	N/A

6.1.4 Water Services - All Unit Types

Location	All Areas
Description	EAHP for domestic Hot Water Copper Water Services Pipework and associated fittings and accessories.
Lifecycle	Annual Inspection of EAHP and Cylinder
	Annual inspections required for all pipework within landlord areas.
	Cost for replacement equipment to be updated on completion of
	design matrix of equipment at detailed design stage.
Required	Annual Inspections, including legionella testing to be included as part
maintenance	of Development Planned Preventative Maintenance Programme
Year	Annually
Priority	High
Selection	All equipment to be detailed as part of the detailed design section of the
process	development. This equipment will be selected in conjunction with the
	design and management team to meet and exceed the CIBSE
	recommended lifecycles.
Reference	N/A



6.1.5 **Ventilation Services – All Unit Types**

Location	All Areas
Description	 Centralised Mechanical Extract Ventilation System (MEV) Ducting & Grilles
Lifecycle	Annual inspection of MEV and grilles
	Annual Inspection of operation of fan and boost / setback facility.
	Cost for replacement equipment to be updated on completion of
	design matrix of equipment at detailed design stage.
Required	Annual Service Inspections to be included as part of Development
maintenance	Planned Preventative Maintenance Programme
Year	Annually
Priority	Medium
Selection	All equipment to be detailed as part of the detailed design section of the
process	development. This equipment will be selected in conjunction with the
	design and management team to meet and exceed the CIBSE
	recommended lifecycles.
Reference	N/A

6.2 Electrical / Protective Services

6.2.1 Electrical Infrastructure

Location	Switch rooms / Risers
Description	Maintenance of Electrical Switchgear
Lifecycle	 Annual Inspection of Electrical Switchgear and switchboards. Thermographic imagining of switchgear 50% of MV Switchgear Annually and LV switchgear every 3 years. Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
Required	Annual / Every three years to be included as part of Development
maintenance	Planned Preventative Maintenance Programme
Year	Annually
Priority	High
Selection	All equipment to meet and exceed ESB, IS10101:2020, CIBSE
process	recommendations and be code compliant in all cases.
Reference	N/A

6.2.2 Lighting Services internal

Location	All Areas – Internal
Description	Lighting – LED throughout with Presence detection in circulation areas
	and locally controlled in apartments.
Lifecycle	Annual Inspection of All Luminaires
	Quarterly Inspection of Emergency Lighting.
	Cost for replacement equipment to be updated on completion of
	design matrix of equipment at detailed design stage.
Required	Annual / Quarterly Inspections certification as required per above
maintenance	remedial works.
Year	Annually / Quarterly
Priority	High
Selection	All equipment to meet requirements and be in accordance with the
process	current IS3217:2013 + A1 2017, Part M and DAC Requirements.
Reference	N/A

6.2.3 Lighting Services External

Location	All Areas – Internal
Description	Lighting – All LED with Vandal Resistant Diffusers where exposed.
Lifecycle	Annual Inspection of All Luminaires
	Quarterly Inspection of Emergency Lighting
	Cost for replacement equipment to be updated on completion of
	design matrix of equipment at detailed design stage.
Required	Annual / Quarterly Inspections certification as required as per the PPM
maintenance	schedule.
Year	Annually / Quarterly
Priority	High
Selection	All equipment to meet requirements and be in accordance with the
process	current IS3217:2013 + A1 2017, Part M and DAC Requirements.
Reference	N/A



6.2.4 Protective Services – Fire Alarm – Apartments Only / Duplexes

Location	All areas – Internal
Description	Fire alarm
Lifecycle	 Quarterly Inspection of panels and 25% testing of devices as per IS3218:2013 + A1 2019 requirements.
	 Cost for replacement equipment to be updated on completion of design matrix of equipment at detailed design stage.
Required	Annual / Quarterly Inspections certification as required as per the PPM
maintenance	schedule.
Year	Annually / Quarterly
Priority	High
Selection	All equipment to meet requirements and be in accordance with the
process	current IS3218:2013 + A1 2019 and the Fire Cert
Reference	N/A

6.2.5 **Protective Services – Fire Extinguishers – Apartments Only**

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

6.2.6 Protective Services – Apartment Sprinkler System Apartment / Duplexes (to be confirmed by Fire Cert / Fire Consultant)

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



6.2.7 Protective Services - Dry Risers - Apartment Only

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

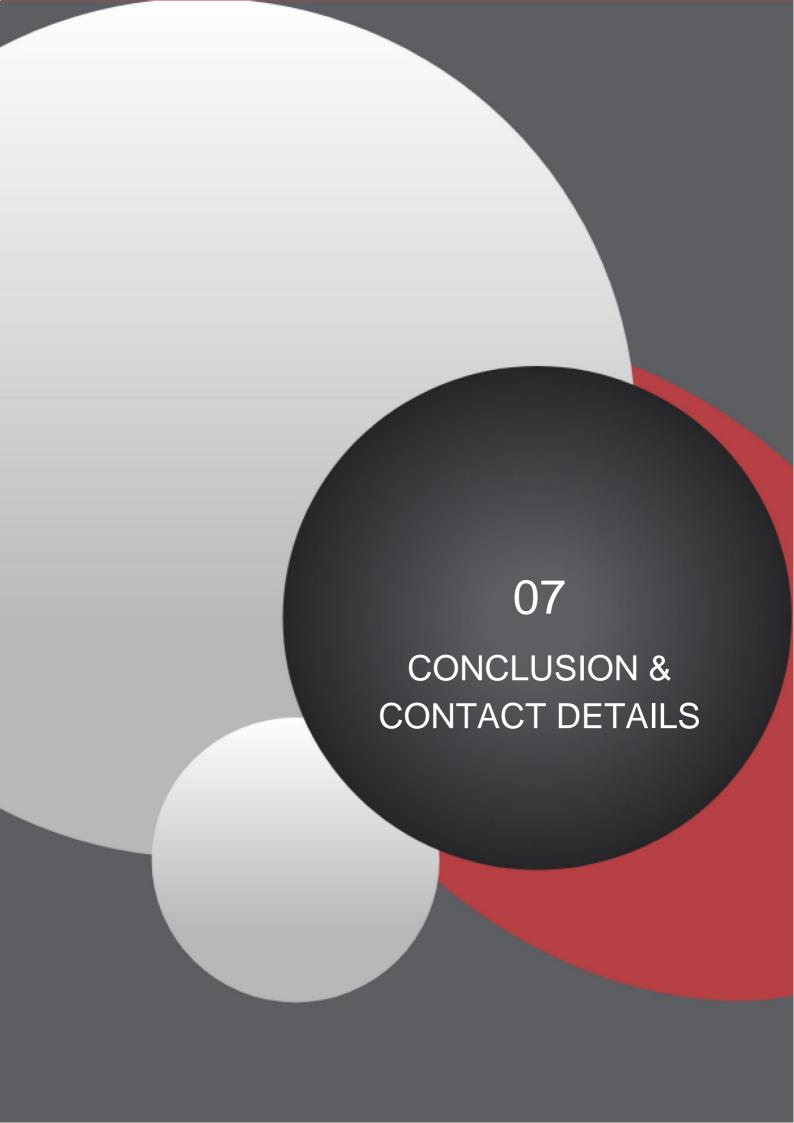
6.2.8 Fire Fighting Lobby Ventilation (To Fire Consultants Design and Specification)

Location	Common Area Lobbies					
Description	Smoke Extract / Exhaust Systems					
Lifecycle	Regular Tests of the system					
	Annual inspection of Fans					
	 Annual inspection of automatic doors and AVOs 					
	All systems to be backed up by life safety systems.					
Required	Annual Service Inspections to be included as part of Development					
maintenance	Planned Preventative Maintenance Programme					
Year	Weekly / Annually					
Priority	Medium					
Selection	All equipment to be detailed as part of the detailed design section of the					
process	development. This equipment will be selected in conjunction with the					
	design and management team to meet and exceed the CIBSE					
	recommended lifecycles.					
Reference	N/A					

6.2.9 Sustainable Services

Location	Roof
Description	PV Array on roof supply each residential unit with renewable electrical energy, supporting Part L/NZEB requirements in conjunction with Exhaust Air Source Heat Pumps. Full Details to be provided at detailed
	stage.
Lifecycle	Quarterly Clean
	Annual Inspection
	Cost for replacement equipment to be updated on completion of
	design matrix of equipment at detailed design stage.
Required	Quarterly / Annual
maintenance	
Year	Annually
Priority	Medium
Selection	All equipment to be detailed as part of the detailed design section of the
process	development. This equipment will be selected in conjunction with the
	design and management team to meet and exceed the CIBSE
	recommended lifecycles.
Reference	N/A





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

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