

BUILDING LIFECYCLE REPORT REPORT

Cleeves Riverside Quarter | October 2025

CRQMP-FCBS-XX-XX-RP-AA-0030

P01 - 17/10/2025

NOTE: THIS REPORT IS TO BE READ IN CONJUNCTION WITH PROJECT TEAM DOCUMENTATION & ASSOCIATED REPORTS INCLUDING THE OPERATIONAL MANAGEMENT PLAN

CONTENTS

1.0 INTRODUCTION

2.0 PROPOSED DEVELOPMENT

3.0 MEASURES TO MANAGE & REDUCE COSTS

ENERGY

MATERIALS

ADDITIONAL SUSTAINABILITY, HEALTH & WELLBEING MEASURES

REFER TO OPERATIONAL MANAGEMENT PLAN FOR ASSESSMENT OF LONG TERM RUNNING AND MAINTANANCE COSTS.

1.0 INTRODUCTION

This Building Lifecycle Report has been prepared by Feilden Clegg Bradley Studios and Bucholz McEvoy Architects on behalf of Limerick Twenty Thirty (LTT) to illustrate how the outline specifications, the design and material principles which have informed the design of building roofs, facades and internal layouts of the proposed development will impact the long term running and maintenance costs, and measures considered to reduce costs for the benefit of future residents of the Cleeves Riverside Quarter site.

Please refer to the separate Operational Management Plan for details on property management for the proposed residential and student residential developments, including assessment of long term running and maintenance costs.

AIDT Project Team

The following team of consultants have been employed to develop these proposals:

Architect:	Feilden Clegg Bradley Studios
Architect:	Bucholz McEvoy Architects
Landscape Architect:	Mitchell + Associates
Structural Engineer:	ARUP
Civil Engineer:	ARUP
Services Engineer:	ARUP
Fire Safety Engineer:	ARUP
Flooding Consultant:	ARUP



Figure 1.1 - Planning Application Boundary

2.0 PROPOSED DEVELOPMENT

The site, known locally as 'Cleeves Riverside Quarter' comprises the former industrial mill complex ('Cleeves') situated on the northern side of the River Shannon, Limerick City and occupies the area between; Stonetown Terrace Road to the northeast; O'Callaghan Strand to the southeast; Condell Road (R527) to the southwest; and, Salesian Primary School and the 'Fernhill' residential estate to the northwest and west respectively - all situated in the townland of Farranshone More in Limerick City. The site is dissected by North Circular Road where it extends between Shelborne Road Lower and O'Callaghan Strand. The full extent of the planning application site is detailed in Figure 1.1 on the prior page.

The proposed development seeks:

A. Demolition of a number of structures to facilitate development and

B. Construction and phased delivery of:

- (i) buildings within the site ranging in height from 3 – 7 stories (with screened plant at roof level) including
 - (a) 234 no. residential units;
 - (b) 270 no. student bedspaces (PBSA) with ancillary resident services at ground floor level;
 - (c) 299sqm of commercial floorspace; and
 - (d) a creche;
- (ii) extensive public realm works, riverside canopy and heritage interpretative panels
- (iv) 3 no. dedicated bat houses;
- (v) Mobility Hub with canopy;
- (vi) pedestrian / cycle connectivity from North Circular Road to Condell Road; and
- (vii) all ancillary site development works including (a) water services, foul and surface water drainage and associated connections across the site and serving each development zone; (b) attenuation measures; (c) raising the level of North Circular Road; (d) car and bicycle parking; (e) public lighting; (f) telecommunications mast; and (g) all landscaping works.

Consent is also sought for use of the PBSA accommodation, outside of student term time, for short-term letting purposes.



Figure 1.2 - Aerial view of proposed development

3.0 MEASURES TO MANAGE AND REDUCE COSTS

Energy

MEASURE		BENEFIT TO RESIDENTS
Fabric Energy Efficiency	Improved building fabric performance beyond minimum requirements set out by the current regulatory requirements of the TGD Part L 2022, titled "Conservation of Fuel and Energy- Dwellings" and "Conservation of Fuel and Energy Buildings other than Dwellings" in a 'fabric first' approach	Improved fabric performance will assist in: reduced space heating demands / reduced energy consumption
	Improved building fabric performance with lower U-values	lower U-values will assist in: minimising heat Losses resulting in reduced energy consumption / minimising carbon emissions / reducing energy bills
	Improved air tightness will assist in minimising heat losses through the building fabric, reducing energy consumption, and minimising carbon emissions	improved air tightness will assist in: minimising heat losses resulting in reduced energy consumption/ minimising carbon emissions/ reducing energy bills
	Reduced thermal bridging at fabric junctions in line with TGD pt L	reduced thermal bridging will assist in: minimising heat losses resulting in, reduced energy consumption, reduced energy bills
Building Energy Ratings	BER certificates for each dwelling in the proposed development will provide detail of the energy performance of the dwellings (calculated relative to energy use for space & hot water heating, ventilation, lighting and occupancy) A2 rating for the apartments is targeted.	Higher BER ratings equate to: reduced energy consumption and reduced running costs
Energy Strategy & carbon emissions	Please refer to separate report by Arup consulting engineers	
	Block centralised plant on each plot with multiple apartments offers efficiencies in energy provision and distribution	Reduced operational and maintenance costs, reduced energy costs

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Materials

MEASURE		BENEFIT TO RESIDENTS
Energy Strategy & carbon emissions	Air Source Heat Pumps (ASHP) included as part of strategy for all apartment buildings: The new residential apartments will be de-centralised building-by-building. There will be a central, roof mounted air-to-water source heat pump on each apartment building and individual water-to-water pumps within each dwelling. ASHP contributes to renewable energy requirement, and provides a no fossil fuel solution.	Lower fuel costs and resultant reduced energy bills; Reduced carbon emissions
	Air Source Heat Pumps (ASHP) included as part of strategy for the student residential blocks: The ASHPs will be part of a centralised system for the student accommodation. There will be dedicated air-to-water source heat pumps for each student wing, providing the primary space heating through radiators which serve the living spaces, bathrooms and bedrooms. ASHP contributes to renewable energy requirement, with a no fossil fuel solution.	Lower fuel costs and resultant reduced energy bills; Reduced carbon emissions
	PV Panels provided to apartment blocks and PBSA to contribute as part of the project's renewable energy strategy to serve the residential blocks collectively on each plot, including common areas	Lower fuel costs and resultant reduced energy bills; Reduced carbon emissions
	PV Panels provided to each townhouse as part of renewable energy strategy	Lower fuel costs and resultant reduced energy bills; Reduced carbon emissions
	Dedicated Mechanical Ventilation Heat Recovery (MVHR) systems will be utilised in each apartment to provide mechanical ventilation	Provides ventilation with reduced energy consumption and reduced energy costs
Lighting	Low internal and external energy lighting	reduced energy consumption / reduced energy costs
	Lighting will include automatic controls where feasible and safe to do so	reduced energy consumption
Natural Ventilation	Natural ventilation is optimised where possible to minimise energy usage and noise levels	Completely passive therefore no energy required. Reduced environmental impact as minimal equipment disposal over life cycle. Avoids costly mechanical ventilation systems, associated maintenance & replacement requirements

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MATERIAL	DESCRIPTION	BENEFIT
Brick	Claybrick work	60 year lifespan, Requires minimal maintenance and does not require regular eplacement
Aluminium	Profiled / Panel metal rainscreen cladding	40 year lifespan, Requires minimal maintenance and does not require regular replacement
Fibreceement	textured and flat fibreceement Cladding	40 year lifespan, Requires minimal maintenance and does not require regular eplacement
Steel	Steel framed prefabricated balconies with metal balustrade	Requires minimal maintenance and does not require regular replacement
Aluminium	External Framing of windows and doors	Requires minimal maintenance and does not require regular replacement
Glazing	Double glazed solid & opening vents, spandrel panels	Requires minimal maintenance
Hardwood Timber	Selected hardwood from FSC forests for internal window frames	60 year lifespan, Requires minimal maintenance and does not require regular replacement
Roof Finishes	Proprietary sedum/green roofs, contributing to surface water drainage and attenuation (as described in the report by the Consulting Civil and Structural Engineer)	Low Maintenance, Helps reduce the surface water run-off . Assists in purifying surface water run-off. Increases biodiversity
Roof Maintenance	Access from stair for roof areas with significant roof plant, otherwise via roof hatch and ladder. Parapets generally at 1100mm above roof level without need for fall arrest system	Ease of access, reduces need to Does not require regular replacement with regular inspection & maintenance
Terrace paving	Concrete/stone paving to external communal roof terraces. Concrete/stone paving to private terraces	Requires minimal maintenance and does not require regular replacement
	REFER TO FACADES AND MATERIALITY CHAPTER OF ARCHITECTURAL DESIGN STATEMENT FOR FURTHER DETAILS	

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MATERIAL	DESCRIPTION	BENEFIT
Paving Materials	Refer to Landscape report for further details Selected robust high slip resistance paving materials Durable and robust equipment to be used throughout	Ongoing maintenance significantly reduced through use of robust materials installed with proven details
Planting details	Use of proven trees, shrub, hedging, herbaceous and lawn installation planting & staking details (See Landscape Architects report for further details).	Correctly installed planting will develop into well established and robust soft landscape reducing future maintenance
	REFER TO LANDSCAPE ARCHITECT DESIGN STATEMENT FOR FURTHER DETAILS	

3.0 MEASURES TO MANAGE AND REDUCE COSTS

Additional Sustainability, Health & Wellbeing measures

	DESCRIPTION	BENEFIT
HEALTH & WELLBEING	The masterplan organisation and building layouts have been designed to promote a people centred environment, with a balanced provision of both communal spaces, and private amenity spaces for individual homes. Access to nature in generous landscaped open spaces is prioritised. • A high quality landscaped communal spaces both in the public realm and communal residential areas • a public realm that is universally accessible and inclusive to all ages and abilities • optimised natural daylighting both to external amenity spaces and to individual home units • optimised views from inhabited spaces both within the development to external green spaces, water features and city scape beyond • optimised natural ventilation and air quality in internal spaces whilst creating shelter from wind in external amenity spaces • public realm and residential communal spaces inclusive of play space and a mix of active and relaxing amenity spaces	Resulting in improved well being due to social interactions, exposure to natural amenity features, high quality indoor environments
TRANSPORT & MOBILITY	The masterplan and building layouts have been designed to promote sustainable modes of transport and the use of public transport, prioritising pedestrian and cycle routes in the public realm, with generous high quality & secure bike parking. EV charging points are provided on each plot, and residential car club sharing is provided for use by all residential developments on the Shipyard site, supplemented by public mobility hub. Refer to separate report by consulting engineers for future details	Lower cost options due to car sharing opportunities and alternative modes of transport Reduced carbon emissions
WASTE MANAGEMENT	Please refer to Operational Waste Management Plan by Atkins Realis.	

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