



Comhairle Cathrach  
& Contae **Luimnigh**

**Limerick** City  
& County Council

## Part 8 Planning Report

**Project:**

10 No. Unit Social Housing Development at  
Radharc an Ghleanna, Kilfinnane, Co. Limerick

LA Housing Construction & Maintenance  
Limerick City & County Council

**Date:**

December 2021

## **Design Team Directory:**

### **Architect / Client:**

Limerick City + County Council, Merchant's Quay, Limerick

Local Authority Housing Construction + Maintenance

Contact: Mr. Cathal O'Boyle / Mr. Don Shorten

### **Civil + Structural Engineer:**

Cronin Sutton Cotter, 45 O'Connell Street, Limerick City

Contact: Mr. Gary Cotter

### **Mechanical + Electrical Engineer:**

Moloney Fox Consulting, 46 O'Connell Street, Limerick City

Contact: Mr. Matt Fox

### **Project Supervisor Design Stage:**

Aegis Safety Management, Greenpark Avenue, S.C.Rd., Limerick

Contact: Ms. Christine Madden / Mr. Mike Keyes

### **Quantity Surveyor:**

Molloy QS, 17 Upper Cecil Street, Limerick City

Contact: Mr. John O'Brien

**Index :**

<b>1.0</b>	<b>introduction</b>	<b>9.0</b>	<b>materials &amp; construction</b>
<b>2.0</b>	<b>site location + description</b>	<b>10.0</b>	<b>mechanical &amp; electrical services</b>
<b>3.0</b>	<b>context &amp; planning policy</b>	<b>10.1</b>	<b>electrical supply</b>
<b>4.0</b>	<b>schedule of units</b>	<b>10.2</b>	<b>telecom services</b>
<b>5.0</b>	<b>site conditions</b>	<b>10.3</b>	<b>television</b>
<b>5.1</b>	<b>flood risk assessment</b>	<b>10.4</b>	<b>heating</b>
<b>5.2</b>	<b>archaeology</b>	<b>11.0</b>	<b>energy &amp; environment</b>
<b>5.3</b>	<b>topography</b>	<b>11.1</b>	<b>thermal performance</b>
<b>6.0</b>	<b>design statement</b>	<b>11.2</b>	<b>water conservation</b>
<b>6.1</b>	<b>connectivity</b>	<b>11.3</b>	<b>refuse</b>
<b>6.2</b>	<b>scale, form + finish</b>	<b>11.4</b>	<b>biodiversity</b>
<b>6.3</b>	<b>public realm</b>	<b>12.0</b>	<b>drainage</b>
<b>6.4</b>	<b>house design</b>	<b>12.1</b>	<b>water supply</b>
<b>6.5</b>	<b>passive surveillance</b>	<b>12.2</b>	<b>foul &amp; storm drainage</b>
<b>7.0</b>	<b>accessibility</b>	<b>12.3</b>	<b>suds</b>
<b>8.0</b>	<b>car + bike parking</b>	<b>13.0</b>	<b>conclusion</b>

## 1.0 Introduction

This Part 8 Report addresses a range of items that are pertinent to the planning process for the enclosed 10 No. unit social housing scheme in Radharc Cillín, Kilfinane, County Limerick. The report contextualises the project with respect to: the proposed site and associated site conditions; the design approach; planning objectives; heritage, conservation and archaeology; accessibility; parking and bicycle facilities; services; materials and construction; and, environmental considerations, SuDs and biodiversity. This project has been developed in accordance with current planning guidelines, departmental circulars and the Capital Works Management Framework (CWMF) process.



*Above – 3D image of proposed 10 unit scheme*

## 2.0 Site Location + Description

The subject site, measuring approximately 0.42 hectares in area, is located within the existing housing estate of Radharc Cillín, to the Western edge of Kilfinane. Kilfinane is a Level 4 settlement (as defined by the Draft Limerick Development Plan 2022-2028) located 48km South of Limerick City and 19km East of Charleville on the Limerick / Cork border. Kilfinane is a historically rich village, with medieval origins, that lies in close proximity (8km) to the Ballyhoura Mountains and associated amenities such as nature trails / hiking, forest walks and mountain biking facilities. Notably, the town includes a number of protected structures and the town centre is designated as an Architectural Conservation Area.



*Above - Kilfinane Satellite Image with indicative Site Boundary (in Red)*

### **3.0 Context & Planning Policy**

The project approach has been developed with consideration to the Limerick County Development Plan 2010-2016, the Kilfinane Local Area Plan and the Draft Limerick Development Plan 2022-2028 (LDP), in addition to associated national planning documents and guidelines.

With respect to LDP Objectives for Level 4 Settlements, as defined by the Settlement and Housing Strategy, Objectives SS011 and SS012 are of importance with reference to the proposed development: SS 011 addresses scale of development (10-15%), proportion and pattern of growth and the sustainable use of services; and, SS 012 makes reference to the Kilfinane Local Area Plan. The proposal takes account of these objectives in addition to planning information set out in CDP Zoning Maps, Amenity Maps, Architectural Conservation Area Maps and Flooding Maps.

### **4.0 Schedule of Units**

The proposed development includes 10 No. housing units, which includes 8 no. houses and 2 no. duplex apartment units. This is summarised in greater detail in the table below for clarity.

House Type	Area	No. Units	No. Bedrooms	Double Bedrooms	Single Bedrooms	No. People p/Unit [Total]
A1 / A2	119/120 sqm	3	4	3	1	7 [21]
B	101 sqm	3	3	2	1	5 [15]
C	88 sqm	2	2	2	0	4 [8]
D1 / D2	49 sqm	2	1	1	0	2 [4]
<b>Total</b>	-	<b>10</b>	-	-	-	<b>48 People</b>

*Note: House types D1 / D2 are duplex apartment units, with own door access to the first floor unit.*

## 5.0 Site Conditions

The site is a greenfield site that slopes from the Southern access point, with the existing housing estate, down to the Northern boundary. The Western boundary comprises of an established natural hedgerow which includes a mix of native species and mature Ash trees. There are scenic views of County Limerick to the North of the site due to the sloping topography and elevated position.

### 5.1 Flood Risk Assessment

With reference to the LDP, the zoning maps identify that the site is not included in an area at risk of flooding, this has also been addressed in the annexed report by Cronin Sutton Cotter Consulting Engineers.

### 5.2 Archaeology

A Preliminary Archaeological Impact Assessment was carried out on the site by Sarah McCutcheon, Executive Archaeologist with Limerick City and County Council. The Assessment noted that there were several Recorded Monuments in the immediate area, including -

- an enclosure, LI048-056, circa 106m to the north in an adjoining field;
- a tower house LI048-057, within the town circa 323m to the east;
- an earthwork, LI056-019, 392m to the SW; and,
- a standing stone, LI048-118 277m to the NW.

It was noted that a subdivision in the field was shown on the first edition 1840s OS 6" map and the first phase of Local Authority Housing in Radharc Cillín (2007) was archaeologically monitored (06/1221) and features of interest were recorded. Consequently advanced archaeological test trenching should be carried out across the proposed site area prior to construction work commencing on site.

### 5.3 Topography

The site is located on a natural slope which has directly influenced the design of the road and footpath layout in addition to the levels of the houses. This has primarily impacted the scheme with respect to: pedestrian access and gradients; ground works / retaining elements; stepped foundations; and raised terraces and associated stairs to the rear gardens of the proposed houses.

## 6.0 Design Statement

The housing units are in two terraced blocks along the Southwest side of a new cul-de-sac road sloping down from Southeast to Northwest. The units are two-storey 2, 3 and 4 bedroom houses with the exception of two 1 bedroom duplex apartments in Block B. Primary design considerations include:.

### 6.1 Connectivity

The proposed roadway provides an opportunity to provide the basis for a pedestrian / bicycle connection around the Western side of the town. This aligns with Objective K104 of the Draft Limerick Development Plan 2022-28 (LDP) –

*“Objective K104 – Pedestrian / Cycling Connectivity – It is an objective of the Council to improve and create additional facilities for pedestrians and cyclists as opportunities arise as part of new developments, including the provision of a pedestrian link from Radharc Cillín housing estate to the secondary school.”* LDP, Vol. 2, Level 4 Settlements zoning and development objectives, Pg.96.



Above – Indicative diagram illustrating potential cycle / pedestrian link to West of Kilfinane



## 6.2 Scale, Form + Finish

The proposal reflects the site location in a rural town setting; incorporating densities appropriate to a village context and rural vernacular building forms, while maintaining a residential neighbourhood environment.

The two storey housing units have traditional 'A' framed roofs with the eaves to roadside for the majority of the road. The units include punctuating gable-fronted houses to bookend North and South and to acknowledge the crank at the middle of the elevation. The cranked plan is to allow for the retention of existing underground foul and storm lines that service the greater town.



*Above – Image illustrating front elevation with cranked plan from the North of the site*

The units have recessed porch entries and, in addition, the ground floor duplex / two-bedroom units have corner windows on the porches to increase passive supervision of their entry and the road. The rear gardens include a raised private terrace before stepping into soft landscape gardens, this is to manage the slope of the site. The small front open spaces are sufficient to house bins / bikes but are restricted by the site constraints.



*Above – Aerial image illustrating form / scale of development on site*





*Above – Image illustrating example of front garden with recessed porch incorporating corner window, seat and planter.*

The houses are finished in painted render with a blue / black slate roof and Aluclad windows. A buff brick is used to the front elevations to provide variation, contrast and depth. Note, buff brick has historic precedent in Kilfinane, a number of protected structures include the material finish; refer to Kilfinane Convent (RPS Reg No.1294) and the associated house (RPS Reg No.1297).



*Above – Image illustrating response to sloped topography with raised rear terraces accessing rear lawn and gardens*

### 6.3 Public Realm

The DMURS and QHFSC guidelines set out objectives and standards for street design, dwelling design, public open space and private open space which have been taken into account and carried through to this Part 8 proposal.

- The design of internal streets within the site, including turning circles, corner junction radii, footpath and road widths comply with the parameters set out in DMURS. Carriageway widths will be minimised and combined with on-street parking to effectively calm traffic;
- The proposed building forms and interface comply with parameters for the proposed street types and aims to maximise active frontage and passive surveillance, while respecting the privacy of the individual units;
- The selected building materials will reinforce a sense of place with the proposed rendered elevations referencing the nearby existing residential units and brick referencing established materials referencing the Kilfinane historic context;
- The roads layout within the proposed development will be designed in accordance with guidance set out in the Design Manual for Urban Roads and Streets (2013) and the LDP;
- Trees, footpaths, soft landscaping and high quality public lighting is proposed within and to the perimeter of the site;
- Trees planted will be of sufficient maturity to withstand potential vandalism;
- Provision of privacy strips to each unit with provide transition buffer from public realm.

#### Public Open Space:

The CDP requires the provision of 15% public open space in the case of residential development proposals on greenfield sites. Taking the proposed and existing developments together the open space requirements will be met primarily by the large green open space in the existing estate (which accounts for over 15%) but additionally with ancillary landscaped areas within the proposed phase.

#### Shared Surface + Landscaped Area:

The shared surface area is to be a surface of hard landscaping where people and vehicles share a section of the street space safely, and on equal terms, and has been designed in accordance with guidance set out in DMURS. This is to provide a safe crossing point and calm traffic with a raised table.

The landscaped area to the front of the houses has been included to manage limitations set by the fall of the slope and by the presence of underground services through the site. This has been used as an opportunity to provide a palette of high quality hard materials and finishes and the careful placement of street trees, parking and street furniture to ensure a successful design. Well designed and robust communal features will be incorporated into the area including; seating, so that people can gather and

converse in comfort – particularly older people; and, street trees, areas of planting and a pockets of green space will provide a high level of amenity in a small area.

#### Private Open Space:

As per the LDP, 1-2 bedroom units are required to have a 48 sqm rear garden; and 3-5 bedroom units are required to have a 60-75 sqm garden. The 10 no. proposed units comply with these standards as per the table below which outlines the proposed rear garden areas –

Unit No.	Unit Type	Garden Requirement	Proposed Rear Garden Area
1	4 Bed House	60-75 sqm	100 sqm
2	3 Bed House	60-75 sqm	67 sqm
3	3 Bed House	60-75 sqm	74 sqm
4	3 Bed House	60-75 sqm	83 sqm
5	4 Bed House	60-75 sqm	115 sqm
6	1 Bed Duplex Apartment	48 sqm	73 sqm
7	1 Bed Duplex Apartment	48 sqm	60 sqm
8	2 Bed House	48 sqm	75 sqm
9	2 Bed House	48 sqm	86 sqm
10	4 Bed House	60-75 sqm	178 sqm

## 6.4 House Design

The design of individual houses for the development aim to create active street frontages and to maximise passive surveillance of the surrounding streets and spaces. All units are provided with own door access. Room sizes within units are based on minimum habitable room sizes set out in ‘Quality Housing for Sustainable Communities – Dept. of Environment, Heritage & Local Government, 2007’.

## 6.5 Passive Surveillance

In order to create a safe and secure environment for residents, the proposed development emphasises an active frontage along the street and public open space. The scheme is designed with each dwelling type including forward facing living / kitchen-dining space to maximise overlooking of public areas. Elevations are designed to incorporate large windows to enhance passive surveillance of the entrances, street and landscaped area.

## 7.0 Accessibility

The proposed scheme aims to foster an inclusive approach to the design and construction of the public realm and new residential building developments. The site development works and residential units have been designed to comply with the requirements of Part M 2010, Section 3: Access and Use of Dwellings.

- The approach to dwelling entrances will be level or gently sloping;
- Main entrances will be accessible;
- Internal corridor widths / clear widths of doorways comply with TGD Part M requirements;
- All units will be provided with an accessible WC;
- Switches and sockets will be located at accessible heights; and,
- Rear gardens have been designed to accommodate accessible terraces.

## 8.0 Car + Bike Parking

As per the LDP the following tables address the requirements for car and bike parking in the proposed development. Please note 2 no. additional accessible spaces have also included in the scheme in addition to the provision outlined below.

Car parking requirement	Resident requirement	Visitor requirement	Total
Four-bed houses (3 no.)	2 spaces p/u (6 no.)	1 space per 3 no. Units (1 no.)	7 spaces
Three-bed houses (3 no.)	1 space p/u (3 no.)	1 space per 3 no. Units (1 no.)	4 spaces
Two-bed houses (2 no.)	1 space p/u (2 no.)	1 space per 3 no. Units (1 no.)	3 space
One-bed apartments (2 no.)	1 space p/u (2 no.)	1 space per 3 no. Units (1 no.)	3 space
<b>Total</b>	<b>13 No Resident Parking</b>	<b>4 No Visitor Spaces</b>	<b>17 No Total</b>

Bike parking requirement	Resident requirement	Visitor requirement	Total
Four-bed houses (3 no.)	2 spaces p/u (6 no.)	1 space per 2 no. Units (1.5 no.)	7.5 spaces
Three-bed houses (3 no.)	1 space p/u (3 no.)	1 space per 2 no. Units (1.5 no.)	4.5 spaces
Two-bed houses (2 no.)	1 space p/u (2 no.)	1 space per 2 no. Units (2 no.)	4 space
One-bed apartments (2 no.)	1 space p/u (2 no.)	1 space per 2 no. Units (2 no.)	4 space
<b>Total</b>	<b>13 No Resident Bike Parking</b>	<b>7 No Visitor Spaces</b>	<b>20 No Total</b>

## **9.0 Materials & Construction**

The building materials will be of a high quality with a focus on robust materials that reduce the requirement for excessive maintenance works. This will include rendered elevations with plinths of fair faced render to the lower level; sections of brick elevations with brick sills and brick capping.

Fibre cement slate roofing, aluclad windows and galvanised steel railings and gates are also proposed. Quality, durable materials will also be selected for external and landscaping finishes – street lighting, paving etc. It is envisaged that traditional masonry construction systems will be implemented throughout the project. Note, due to ground conditions identified during the site investigation works it is currently envisaged that a piled foundation will be required.

## **10.0 Mechanical & Electrical Services**

### **10.1 Electrical Supply**

An existing ESB kiosk is located at the entrance to the existing estate, this will provide the basis for an individual ESB connection for each residential unit. In order to ensure a clear and uncluttered appearance of the public realm, all meter boxes will be concealed. A duct is to be included to the roadside parking spaces to provide provision of services for electric vehicle charging points in future. Refer to annexed Mechanical and Electrical Engineer's documents for further information.

### **10.2 Telecom Services**

Individual underground telecom ducts will be distributed to each of the new residences in the zone from a designated telecom distribution network.

### **10.3 Television**

TV cabling and TV points shall be provided within each residential unit. Wire ways and data cabling shall be provided for broadband facility within each residential unit.

### **10.4 Heating**

An exhaust air heat pump (EAHP) unit will be installed in each house complete with flexible connections and anti-vibration mountings. Wet areas such as utility rooms, bathrooms, en-suites, and kitchens will be provided with extract grilles from manifolds. Refer to annexed Mechanical and Electrical Engineer's documents for further and more detailed information.

## **11.0 Energy & Environment**

### **11.1 Thermal Performance**

U Values of individual elements of the buildings will be within the maximum elemental U-value standards set out by Technical Guidance Document Part L of the Building Regulations.

### **11.2 Water Conservation**

All units will be provided with low or variable capacity flushing toilets as well as low volume taps and showerheads. Compact water distribution systems will be provided to hot water distribution pipework. Grey water systems will also be included with water storage tanks, connected to the rear rainwater down pipe / drainage system, provided to the rear garden for external domestic use / gardening.

### **11.3 Refuse**

All units will be provided with individual secure bin store areas, located within the privacy strip at the front of the units or to the rear, in the case of semi-detached units with side access. These bin store areas will be robust in nature and will be constructed to match the front garden.

### **11.4 Biodiversity**

The scheme design has been developed with reference to guidelines set out in the publication Biodiversity in New Housing Developments: Creating Wildlife-Friendly Communities - NHBC Foundation 2021. In this respect, the existing hedgerow to the Western (rear) boundary is being retained and the proposed boundary treatment will be sensitive to that effect. This will create a green buffer to the rear of the gardens and help to provide cover for the flight of bats and birds. It will also provide shelter to the proposed back gardens which will contribute to the amenity of the proposed private open space.

The retention of the hedgerow, and associated Trees, will also retain a natural habit and provide a means for wildlife to move in and out of the green spaces to the rear of the houses. Areas of the public open space will also be landscaped and include wildflower meadow areas in line with the “avoid, minimise, rehabilitate, compensate / offset” framework for new greenfield housing development.

The provision of integral roost and nest sites / bee blocks will also be included to the facades to provide nesting sites for bats, house sparrows, starlings and solitary bees. These will be included to the rear facades to provide shelter, passive solar gain, proximity to the existing hedgerow and support for native / migratory colonial species.

## **12.0 Drainage**

### **12.1 Water Supply**

It is intended that the scheme will connect to the existing services present in the housing estate, a pre connection enquiry has been made to Irish Water and the scheme has received approval in principle. Please refer to Cronin Sutton Cotter consulting engineer's enclosed documents for further information.

### **12.2 Foul & Storm Drainage**

It is intended that the scheme will connect to the existing services present in the housing estate, a pre connection enquiry has been made to Irish Water and the scheme has received approval in principle. Please refer to Cronin Sutton Cotter consulting engineer's enclosed documents for further information.

### **12.3 SuDs**

As per LDP policy on surface water drainage, a sustainable urban drainage system will be incorporated into the approach to manage surface water across the site.

In terms of the approach, hard surfaces will be avoided, where practicable, and soft surfaces to encourage the slow-down of water run-off will be specified. The principles of the SuDs management train will be implemented through the use of swales to both the rear of the back gardens (to the native hedgerow) and also to the side of the road to the front elevation, where a green strip has been included. The green areas to the road will include appropriate planting to support rain gardens, at intervals and as the proposal proceeds to the lower section of the site. Permeable paving will be included to hard landscaped areas and to the table top shared-surface to the road. As broached, grey water storage tanks will also be installed to the rear gardens to provide domestic grey water systems for garden use.

## **13.0 Conclusion**

This Part 8 Report demonstrates how the enclosed 10 no. unit housing proposal in Radharc Cillín has been designed and developed to constructively address: the requirements of local housing demand; local urban design objectives, the site and the characteristics of the local context; planning objectives; heritage, conservation and archaeology; accessibility; parking and bicycle facilities; services; materials and construction; and, environmental considerations, including SuDs and biodiversity.

The scheme is a well-considered proposal that will positively address local housing demand in Kilfinane and contribute to the development of the unique urban fabric of the area.



## **PRE-PART 8 INTERNAL SUBMISSIONS**

<b>TO:</b>	Planning Department, Limerick City & County Council
<b>CC:</b>	Cathal O'Boyle, Senior Executive Architect LA Housing Construction + Maintenance
<b>FROM:</b>	Don Shorten, Executive Architect LA Housing Construction + Maintenance
<b>DATE:</b>	Friday, 10 <sup>th</sup> December 2021
<b>REFERENCE:</b>	Part 8 Submission pertaining to the proposed development of 10 no. Social Housing units at Radharc Cillín, Kilfinane, County Limerick

By email dated 25<sup>th</sup> November 2021, the Planning & Environmental Services Department requested that design documentation pertaining to the proposed development of 10 no. new Social Housing units at Radharc Cillín, Kilfinane, should be referred to a prescribed list of Limerick City & County Council personnel for proposal comment / input. A copy of the preliminary Scheme Design documentation was circulated to the noted personnel via email dated 25<sup>th</sup> November 2021. A summary of personnel to whom design information was issued along with a record of comments received is scheduled hereafter:

<b><i>Name:</i></b>	<b><i>Issued:</i></b>	<b><i>Comment Date:</i></b>	<b><i>Reference:</i></b>
Tony Carmody	25.11.2021	01.12.2021	Refer Appendix A
Lorraine Treacy	25.11.2021	08.12.2021	Refer Appendix B
Brian Bourke	25.11.2021	-	
Tara Flanagan	25.11.2021	-	
Pat Fitzgerald	25.11.2021	-	
Simon Jennings	25.11.2021	-	
Sinead Kennedy	25.11.2021	-	
Robert Gallagher	25.11.2021	-	
Sean McGlynn	25.11.2021	-	
Sarah McCutcheon	25.11.2021	-	
Tom O'Neill	25.11.2021	-	
Tom Cassidy	25.11.2021	-	

**Appendix A - Submission (1)**

**Tony Carmody**

**Roads, Traffic & Cleansing**

**01.12.2021**

**Submission Details:**

Comments received in respect of the Scheme Design proposal as circulated are itemised hereafter. *LA Housing Construction + Maintenance comments are included in respect to each point (in blue / italic font) for clarity.*

<b>Road Observations</b>
<b>Surface Water and Foul:</b>
1. Confirmation is required from the applicant that any existing services that form part of the application are examined with respect to their condition, capacity and suitability for the proposed development. Written confirmation that this review has been carried out is required.
<i>Noted, confirmation of same will be provided post planning.</i>
2. What are the current condition surface water system. (CCTV survey maybe required)
<i>Noted, the existing system will be assessed as part of the detail design process.</i>
3. Direction of flow not indicated.
<i>Flow direction is consistent with topography and running in a Northerly direction, this will be included.</i>
4. Pipelines may exceed 90m.
<i>Noted.</i>
5. Longitudinal sections should be submitted.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
6. Where is the surface water discharging to and does it have adequate capacity.
<i>It is currently envisaged that it will discharge to a combination of the existing surface water main on site and to the SuDs system. Further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
7. Connection assumed across from house 2 no manhole at connection.

<i>Noted.</i>
8. No attenuation tank, Class 1 By-Pass Interceptor or flow control device indicated.
<i>Noted.</i>
9. Details of the attenuation Tank, Class 1 By-pass Interceptor (show ventilation pipe details and the details of/where the unit for the messaging system and alarm will be located) and flow control device shall be submitted to the Planning Authority for approval.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
10. Class 1 By-Pass Interceptors should be sized appropriately (based on flow and drainage area) and fitted with a ventilation pipe and an oil alarm & messaging system. All installation, handling, excavation and maintenance procedures should be carried out in accordance with manufacturer's guidelines.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
11. The applicant shall confirm that the Surface Water Disposal Layout Plan is in line with the Irish Water Code of Practice.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
12. No SuDs indicated such as permeable paving on the driveways and car parking in public realm, swales, rain gardens/tree pits.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
13. Connections assumed, these will have to be clarified.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
14. Lack of road gullies indicated.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
15. A detailed cross section through the car parking areas showing construction build up for each layer with clear specifications, which shall include how they are

connected together and for a flow control device on the overflow system connected to the main internal system.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
16. Details on the over flow pipe systems.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
17. Cross section through the swales with over flow systems confirming the type of soil, stone and geotextile layers that will be used in line with the “SuDs Manual”.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
18. Tree pit/rain garden cross section with overflow systems.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
19. Longitudinal section of swales.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
20. Details of the material to prevent the spread of the tree roots shall be submitted for approval if selected.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
21. Outfall cross section.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
22. Submit gradients of the side slopes for swales and longitudinal gradients.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
23. Submit risk indices to areas of the development dependent on their land use to represent the level of pollution that is typically generated and therefore must be ‘treated’ with SuDs components to meet water quality standards;
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
24. Submit mitigation indices to demonstrate that it is greater than risk indices;

<p><i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i></p>
<p>25. As the applicant will be including SuDs components to the surface water design, this should have an effect on the overall design, therefore, The applicant shall submit surface water calculations by way of simulation modelling Micro Drainage or Causeway to include for the following for approval should include the existing that also flows to the discharge point:</p>
<p><i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i></p>
<p>26. The calculation for SuDs measures should be shown as part of the simulation modelling;</p>
<p><i>Noted.</i></p>
<p>27. Hydraulic modelling shall be submitted for the <b>design of the pipes at a 1/5</b> year return period;</p>
<p><i>Noted.</i></p>
<p>28. Hydraulic modelling shall be submitted for the design of the network at a 1/30 year return period to include all pipelines, that requires that no flooding occurs;</p>
<p><i>Noted.</i></p>
<p>29. Hydraulic modelling shall be submitted for the design of the network at a 1/100 year return period to include all pipelines to show that properties are protected against flooding.</p>
<p><i>Noted.</i></p>
<p>30. Summary of Critical Results by Maximum Level (Rank 1) for Storm Design for both the 1/30 &amp; 1/100;</p>
<p><i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i></p>
<p>31. The modelling shall clearly demonstrate that there is sufficient freeboard on the finished floor levels;</p>
<p><i>Noted.</i></p>
<p>32. The modelling shall confirm discharge levels, which shall not exceed 2 l/s/ha or Qbar whichever is the greater restriction. Qbar must be calculated using the Net area</p>

drained and not the gross area of the site (i.e. red line boundary). This discharge rate shall be marked on the <b>manhole in which the flow restricting device is located</b> ;
<i>Noted.</i>
33. The modelling shall demonstrate the pipe velocities, climate change of 20% plus 10% for urban creep;
<i>Noted.</i>
34. All online controls & storage systems;
<i>Noted.</i>
35. Minimum pipe velocities 1.0m/s.
<i>Noted.</i>
<b>Traffic and Pedestrian Issues:</b>
1. Cross section through the proposed ramp required.
<i>Noted, further detail will be issued in coordination with Cronin Sutton Cotter Consulting Engineers post planning.</i>
2. Road markings at the ramp required.
<i>Noted.</i>
3. Proposed future cycle lane indicated with text on layout, where is going to and how is it connected to the existing development which does not have cycle lane.
<i>It is anticipated that it will be located to the Eastern side of the proposed carriageway within the green space. There is sufficient area to link it to the road / pedestrian junction inside the Radharc Cillín estate and orientate the route through the site to the Northern boundary as per planning objectives.</i>
4. Car parking dimensions are required.
<i>Noted.</i>
5. Road markings and signage layout.
<i>Noted.</i>
<b>Public Lighting:</b>
1. The applicant shall submit a revised detailed lighting design with sufficient survey detail / background detail to clearly show the contour/lux levels generated by the proposed lighting installation. It must show how it ties into the existing.

<p><i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i></p>
<p>2. The lighting design shall be designed and signed by a competent Lighting Design Engineer which shall comply with BS5489:2013 and BS EN 13201:2003.</p>
<p><i>Noted.</i></p>
<p>3. The lighting design shall include a legible plot of the lux levels superimposed on the Site Layout Plan to a scale of 1/500 (along with supporting calculations) ensuring maintained minimum point illuminance as outlined below is achieved for Limerick City &amp; County Council's approval.</p>
<p><i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i></p>
<p>4. The Public Lighting Layout shall indicate the location of <b>all</b> lighting columns, ducting, micro pillars and shall include their reference numbers (as per design calculations), the supply circuits, ESB and Local Authority micro pillars and shall include a schedule of lanterns to be installed, inclusive of proposed lantern type and including a photograph.</p>
<p><i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i></p>
<p>5. All lighting infrastructure shall be located in the public realm, with lighting columns typically shown to the rear of footpaths.</p>
<p><i>Noted.</i></p>
<p>6. All lighting columns shall be octagonal galvanised steel to BS EN40 as outlined below.</p>
<p><i>Noted.</i></p>
<p>7. The Lighting columns proposed on the walkway (Luminaries Type B) shall be 6m in Height and shall be hinged type for access / maintenance purposes.</p>
<p><i>Noted.</i></p>
<p>8. The Recommended Minimum Specification for Public Lighting shall be as follows and Lighting Design Engineer shall confirm that the proposed specification is in line with the following:</p>
<p><i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i></p>



<ul style="list-style-type: none"> <li>▪ The specification for the LED Lanterns (Ra&gt;60) is lighting Class S3/P3;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ The LED's have a required maintained minimum point illuminance of <b>1.1</b> lux for proposed and existing footways &amp; average illuminance of <b>5.5</b> lux for roadways and car parking areas;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Lighting columns are designed to BS EN 40;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ LED Lantern, minimum of 150lumens/w;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Neutral White 4000K;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Side-Entry or Post-Top Mounted;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ LM6 Marine Salt Protection;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Ingress Protected IP66;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Impact Resistance IK09;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Lantern (luminaire) types are commonly used brands Certified to BS EN 60598-1:2008;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ LED installations comply with the IET Code of Practice for the Application of LED Lighting Systems 2014;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ The lanterns are equipped with electronic control gear, controlled by photocells (photocells have individual NEMA sockets on each lamp for standard photocell) micro photocells will not be acceptable;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ Dusk to midnight switching is provided in walkways, amenity and play areas, dusk to dawn otherwise;</li> </ul>

<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ A legible plot of the lux levels superimposed on the Site Layout Plan to a scale of 1/500 is submitted (along with supporting calculations);</li> </ul>
<i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i>
<ul style="list-style-type: none"> <li>▪ Lighting must be fully operational prior to the operation of the proposed development;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ The lantern type is a SEAI triple E Registered product;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ 10 year manufacturers <b>Parts and Labour Warranty</b> on Lantern must be submitted as part of FI Response;</li> </ul>
<i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i>
<ul style="list-style-type: none"> <li>▪ 10 year manufacturers <b>Parts and Labour Warranty</b> on Photocell must be submitted as part of FI Response ;</li> </ul>
<i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i>
<ul style="list-style-type: none"> <li>▪ Failure of any lighting components with the warranty period shall be immediately rectified by the applicants supplier by either replacing the luminaire / photocell or by installing a temporary replacement luminaire / photocell until the defective luminaire / photocell has been repaired or replaced;</li> </ul>
<i>Noted.</i>
<ul style="list-style-type: none"> <li>▪ A photograph of the proposed lantern shall be submitted as part of FI Response;</li> </ul>
<i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i>
<ul style="list-style-type: none"> <li>▪ Details of all lighting column types proposed shall be submitted as part of FI Response;</li> </ul>
<i>Noted, further detail will be issued in coordination with Moloney Fox Consulting Engineers post planning.</i>

## Appendix B - Submission (2)

Lorraine Treacy

Planning Department

08.12.2021

### Submission Details:

Comments received in respect of the Scheme Design proposal as circulated are itemised hereafter. *LA Housing Construction + Maintenance comments are included in respect to each point (in blue / italic font) for clarity:*

1. I would put another site notice at the entrance to the estate.
<i>Noted, a second site notice will be located at the primary entrance to the Radharc Cillín Estate.</i>
2. Provide details of boundary treatments – overall site and between units.
<i>Noted, a site drawing with boundary treatments will be included in the drawing package.</i>
3. Provide a planting schedule (native species). There is an opportunity for more trees to be planted.
<i>Noted, an outline planting schedule will be included on the site plan. Due to the complexity of the SuDs system and the associated impact on the landscaping / planting approach this will be addressed on a more holistic level at detail design stage.</i>
4. Your Design Statement refers to the Limerick Development Plan 2022-2028 – I would refer to it as the <u>Draft</u> Limerick Development Plan 2022-2028.
<i>Noted, documents have been updated.</i>
5. The site is zoned ‘Existing Residential’ and ‘Residential in the Kilfinane LAP. Residential development on the site accords with the zoning objective.
<i>Noted.</i>
6. The site is zoned ‘New Residential’ under the Draft Development Plan 2022-2028. You should double check that the proposal is fully contained within the ‘new

<p>residential' zoning for Kilfinane set out in the Draft Development Plan and does not encroach on the adjoining agricultural zoning. You may need to liaise with the forward planning department.</p>
<p><i>Noted, extents of zoning will be confirmed.</i></p>
<p>7. The proposed layout responds to site contours and provides for permeability and surveillance. The adjacent land is now proposed to be zoned 'agriculture' under the Draft Development Plan so I would suggest removing the masterplan information. Proposed links future-proof the development if adjoining lands are zoned for residential development in future Development Plans.</p>
<p><i>Noted, documents have been updated.</i></p>
<p>8. The Kilfinane LAP provides a potential pedestrian/cycle route through the site. Objective KI O4 of the Draft CDP seeks to provide a pedestrian link from Radharc Cillín housing estate to the secondary school. The proposed layout provides for links with adjacent land to support these objectives.</p>
<p><i>Noted.</i></p>
<p>9. Density and public open space calculations should be based on existing / proposed phase and not future phases (adjacent land proposed to be zoned agriculture under Draft Dev Plan). Density requirement is 22u/ha and public open space requirement is 15% of site area. Proposal has a density of 24 u/ha which accords with LAP.</p>
<p><i>Noted, documents have been updated.</i></p>
<p>10. Proposal provides for a good mix of units.</p>
<p><i>Noted.</i></p>
<p>11. Proposed units are of high quality design and it is noted that corner units have a dual frontage for animation and surveillance.</p>
<p><i>Noted.</i></p>
<p>12. It is noted that the dwelling sizes and room sizes comply with the Quality Housing for Sustainable Communities (2007) and adequate private open space has been provided for each unit.</p>

*Noted.*

13. The existing mature hedgerow along the western site boundary is indicated as being retained which is supported.

*Noted.*