



An Gníomhaireacht
Tithíochta
The Housing Agency

CNWQR, Phase 4A

Design Statement



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Introduction

This Design Statement forms a part of the Part VIII submission for Phase 4A of the ‘City Northwest Quarter Regeneration’ (CNWQR) Masterplan in Knocknaheeny, Cork City.

Cork City Council’s CNWQR Masterplan & Implementation Strategy (2011) aims to regenerate one of Cork’s most disadvantaged districts and transform it into a neighbourhood where people and families would choose to live.

The Phase 4A site, greenfield in nature, forms part of the regeneration masterplan. The development of this site will provide much needed social housing and it is intended that it will be occupied by existing residents from other parts of the regeneration area thereby allowing the overall regeneration programme to advance.

The proposed Phase 4A of the CNWQR will comprise the construction of 43no. new residential units as follows:

- 4no. 3-storey, 3-bed houses,
- 33no. 2-storey, 3-bed houses,
- 2no. 2-bed, ground floor apartment,
- 4no. 2-bed, duplex units.

The proposed works will also include the provision of new roads, footpaths, on-street car-parking, retaining walls, boundary walls, fencing, railings, gates, handrails, surface treatments and re-grading, installation of services and utilities throughout the site, landscaping and planting.

1.0 Background

1.1 Background of the Site and Project

The site for Phase 4A forms part of the City Northwest Quarter Regeneration Project (CNWQR) masterplan area and is currently a green field site located at Knocknaheeny Avenue, Knocknaheeny, Cork City (Fig.1 below).

The Cork City Northwest Regeneration Masterplan & Implementation Report (2011) Figure 7.4 indicated private and social housing development. However, after considering the sites relative ease of accessibility and the fact that it is a greenfield site that does not require major infrastructural works, Cork City Council decided that it would be more beneficial to develop this site for social housing.



Fig.1 Site Location, Knocknaheeny, Cork City

1.2 Site Description

The site is located on Knocknaheeny Avenue in Knocknaheeny, on the north-west fringe of Cork City. It is a greenfield site, previously used as a football pitch by locals and encompasses an area of 1.16Ha. The site has not been used as a football pitch for a number of years, since a new, superior pitch on the Kilmore Road Lower was provided in exchange by the Council.

The site is bounded to the north by the social housing estate Killala Gardens, Churchfield Green to the east, Ascension Heights to the south while Knocknaheeny Avenue provides the boundary to the west.

The Cork City Development Plan stipulates that the minimum residential density in suburban areas should be 35-50 dwellings per hectare (ha) and that densities greater than 50 should incorporate apartments.



Fig.2 Aerial image showing Phase 4A site extents in red (source Google Earth)

Proposed Phase 4A

- Total Site Area for Phase 4A: 1.167 Ha
- Total Units: 43 Units
- Density: 37 residential units per Hectare
- Schedule of Accommodation: 37 no. 3-bed houses & 6 no. 2-bed apartments

Total Site Area: 11,167m²/ 1.167Ha comprising 43 units results in approx. 37 residential units per Hectare.

Taking into consideration the relatively significant portion of the site that will be developed for new roads infrastructure, the proposed density of 37/Ha is considered appropriate and in line with the requirements of the Development Plan.

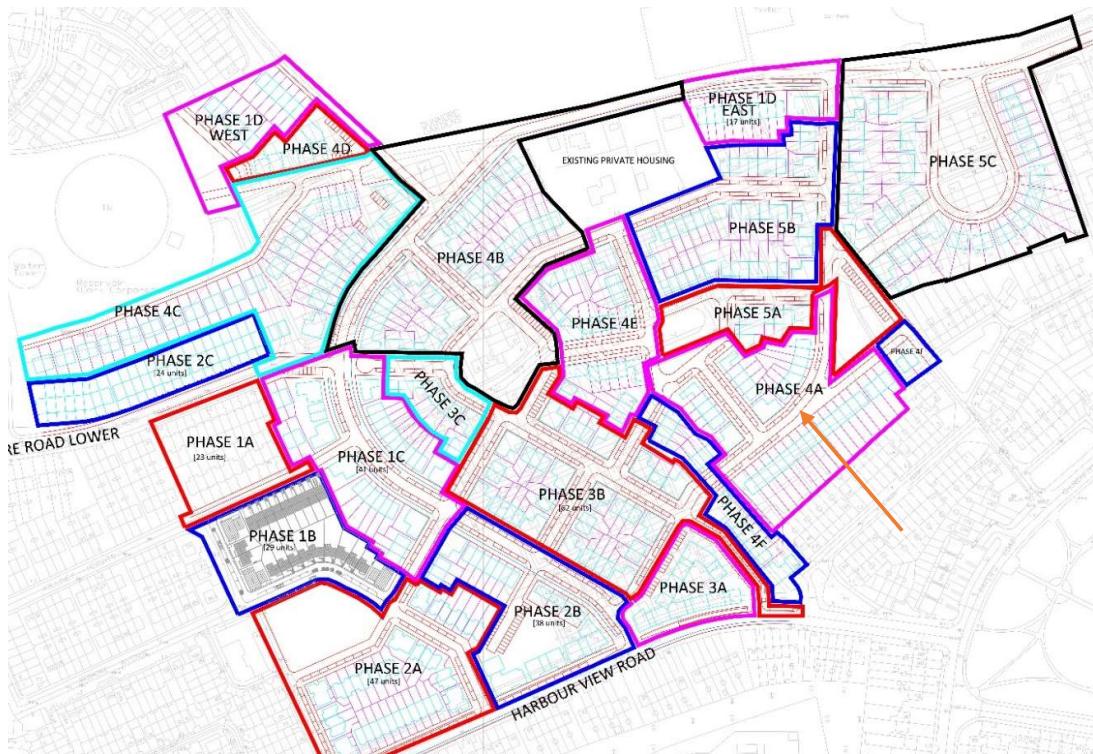


Fig.3 City Northwest Quarter Regeneration Project Masterplan, Proposed future phases

Suitability

- Forms part of the CNWQR Regeneration Masterplan
- Zoned 'Residential' in the Cork City Development Plan
- Under-utilised green-field site within Cork City
- Proximity to services and amenities (Shopping, Centre, Library, Medical, Schools, etc.)
- Located on a bus route (Bus Route 202)
- No particular risk of flooding

Immediate vicinity

The building typology in the immediate vicinity of the subject site is a mixture of 1970's terraced houses and 2-3 storey contemporary dwellings (previously delivered as part of the regeneration programme).

Typology: 2-storey, 3-bedroom houses, and corner apartments/duplexes

Private gardens: in a back-to-back arrangement, defensible space to front, on-street parking

Development Plan Objectives

The following is an outline of the relevant Development Plan Objectives and how these are achieved:

6.1 Residential Strategic Objectives	The scheme makes use of underused land providing a mix of high quality, predominantly family houses, integrated into an existing neighbourhood with good access to services, amenities, and public transport
6.8 Housing Mix	The scheme provides a mix of dwelling types, including: <ul style="list-style-type: none">- 3-storey 3-bedroom houses- 2-storey 3-bedroom houses- 2-bedroom duplexes- Universally designed, ground floor 2-bedroom apartments
6.9 Housing Density	The scheme provides a density of approx. 37 dwellings per hectare

The subject site does not impact on statutory environmental designations such as:

- Special Protection Areas (SPAs)
- Natural Heritage Areas (NHAs) or
- Special Area of Conservation (SACs)

[Refer attached AA Screening Report and EIA Screening Report.]

In addition, the subject site does not contain any protected structure or recorded monuments.

2.0 Site Strategy

2.1 Site Strategy

- Respect existing character, street pattern, building lines, building scale/height
- Maintain consistency between the proposed and the previous phase of the Masterplan
- Back-to-back terraced housing with private gardens
- Includes 3-storey duplexes at the corners to optimise the use of the site and provide passive supervision of all public areas
- Address public open space to north and east of the site
- Parking: mix of on and off-street, in line with existing pattern
- Road width: in accordance with Design Manual for Urban Roads & Streets
- Road pattern: continue masterplan pattern
- Include road re-alignment deflection for space making/vistas



Fig.4 City Northwest Quarter Regeneration Masterplan, Phase 4A outlined in red

2.2 Site Proposal

The proposal calls for the construction of 43no. new residential units, in line with what has been previously proposed in the Masterplan and Implementation Strategy (2011).

It is intended that 6no. new terraces be built comprising of

- 33no. 2-storey, 3-bed houses
- 4no. 3-storey, 3-bed houses
- 4no. 2-storey duplexes
- 2no. Universally Designed, Ground Floor 2-bed Apartments

The corner apartment buildings will feature a fully accessible ground floor apartment with duplex units above.



Fig.5 Proposed Phase 4A, Knocknaheeny

2.3 Public Realm

In addition to the residential units (noted in 2.2 above), new public realm works in the form of new streets, footpaths and shared surface(s) will also be provided.

It is proposed that the new streets will be designed to a high quality and as such will contribute to the character and success of the newly constructed community.

Some of the proposed streets, to the north and east will be designed using shared space principles, encouraging pedestrians, cyclists and the community as a whole to enjoy their shared external spaces.

The shared surface street plays an important part in the overall design of the neighbourhood. The provision of small, planted areas with seating for residents to use as informal amenity space is also provided for.

Through the use of good design and signage drivers, upon entering the street, will be aware that they are in a shared space and will adjust their driving style accordingly. This reduction in speed has been given an approx. value of 20km/h, in line with DMURS document. Pinch points and changes of direction will also contribute to restricting traffic speed through the scheme.

The proposed design of the public realm incorporates the recommendations contained in the Design Manual for Urban Roads and Streets (DoECLG, DTTS) and the Urban Design Manual: A Best Practice Guide (DoECLG).

3.0 Project Description

The strategy for Phase 4A is to continue the pattern of the overall CNWQR masterplan.

As mentioned previously, Phase 4A will provide a mixture of 2 and 3-storey terraced houses with corner duplexes (Fig.6).

The terraced form will minimise the external wall area of each unit and maximise the site efficiency. The terraces are arranged back-to-back and will occupy the perimeter of the scheme, providing passive supervision.

All houses will be provided with defensible space to the front with their own entrance door and private open space in the form of rear gardens, with areas meeting the recommendations of the Cork City Development Plan.

At the North and Central parts of the site, the scale of the houses increases to 3-storey houses (3-bedroom with an additional bedroom on the second floor) and 3-storey corner apartment buildings (2-storey duplexes over a ground floor apartment).

Unnecessary physical and visual barriers are avoided by integrating the scheme into the overall masterplan street pattern and relying on passive supervising as the principle means of achieving security. The entire development will be fully compliant with access regulations, and can be accessed, visited and used by wheelchair users and buggies.

3.1 Proposed Schedule of Accommodation

- 4 no. 3-storey, 3-bed houses (House Type D)
- 33 no. 2-storey, 3-bed houses (House Types: A, B, C)

Apartments:

2 no. 2-bed, ground floor apartment (Universal Design Apartment)

4 no. 2-bed, duplex units (Duplex A, Duplex B)

Total: 43 no. residential units

Bed-spaces:

The 4 no. 3-storey, 3-bed houses (6per) will provide a total of

24 no. bed-spaces

The 33 no. 2-storey, 3-bed houses (5per) will provide a total

165 no. bed-spaces

The 2 no. 2-bed apartments (4per) will provide a total of

8 no. bed-spaces

The 6 no. 2-bed duplex units (4per) will provide a total of

24 no. bed-spaces

Total:

221 no. bedspaces

3.2 Proposed Housing

The proposed housing for Phase 4A incorporates the following unit mix & type:

Terraced Houses:

- 4 no. 3-storey, 3-bed houses (House Type D)
- 33 no. 2-storey, 3-bed houses (House Types: A, B, C)

Apartments:

- 2 no. 2-bed, ground floor apartment (Universal Design Apartment)
- 4 no. 2-bed, duplex units (Duplex A, Duplex B)



Fig.6 Schedule of accommodation



3.3 Proposed House Types

Type A Housing

Type A House includes the following sub-categories/variations:

- A1
- A2
- A1 Crescent
- A2 Crescent

The variation in House Type A is due to

- The mirroring of the house types floor plan and/or
- Minor modification(s) to the footprint/areas in the crescent units

House Type(s) A are 2-storey, 3-bedroom units. The façade treatment incorporates the use of brick to the front elevation and smooth, light-coloured, render to rear.

The internal layout is arranged around an open plan that comprises a living room to the front and kitchen/dining to the rear.

The simplicity of the proposed dwelling allows for modification to the rear if required in the future.

Careful consideration is given to the design of the new terrace and how it will knit into and compliment the adjacent block of existing housing.

House type A respects the existing context through the use of a vernacular-form, the inclusion of the symmetrical pitched-roof and maintaining the scale of the surrounding development.



Type B Housing

House Type B: 2-storey, 2-bedroom units.

The staggered floor plan of this unit type emphasises the entrance and allows for a car space to the front. A semi-enclosed patio area is provided to rear of the unit

The internal arrangement of this house type allows direct access from the kitchen and living room to the rear garden and benefits from the overlooking view into the garden during the day. This also has the added benefit of allowing occupants to monitor children at play at the same time.

The façade treatment incorporates the use of brick to the front elevation and smooth, light-coloured, render to rear.

Careful attention was given to the space between the footpath and front doors; a well-designed entrance area and front door to the scheme will contribute towards creating a visually interesting streetscape while simultaneously providing the required privacy strip for home occupants.

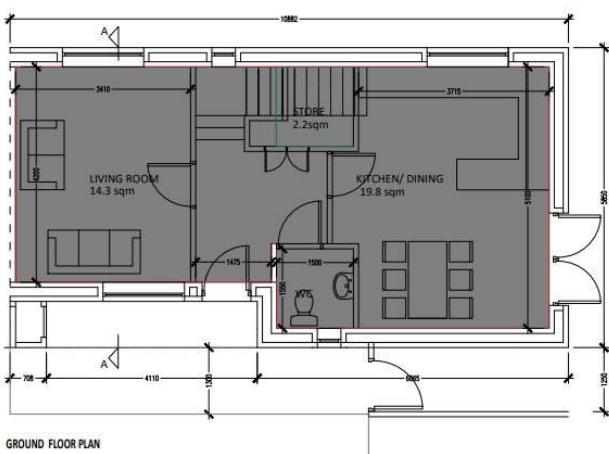
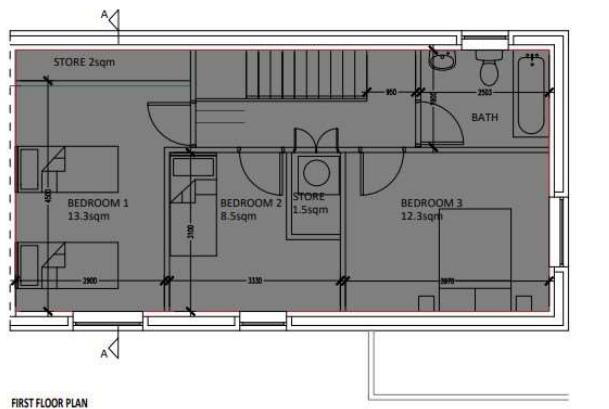


Type C Housing

House Type C: 2-storey, 3-bedroom, 5-person end of terrace units.

The façade treatment incorporates the use of brick to the front and gable and smooth, light-coloured render to rear.

This typology has centrally placed entrance, with Living to one side and Kitchen/Dining to the other side. Staircase and storage space are located centrally to the rear, downstairs WC located adjacent to the main entrance.



Type D Housing

House Type D: 3-storey, 3-bedroom 5-person units.

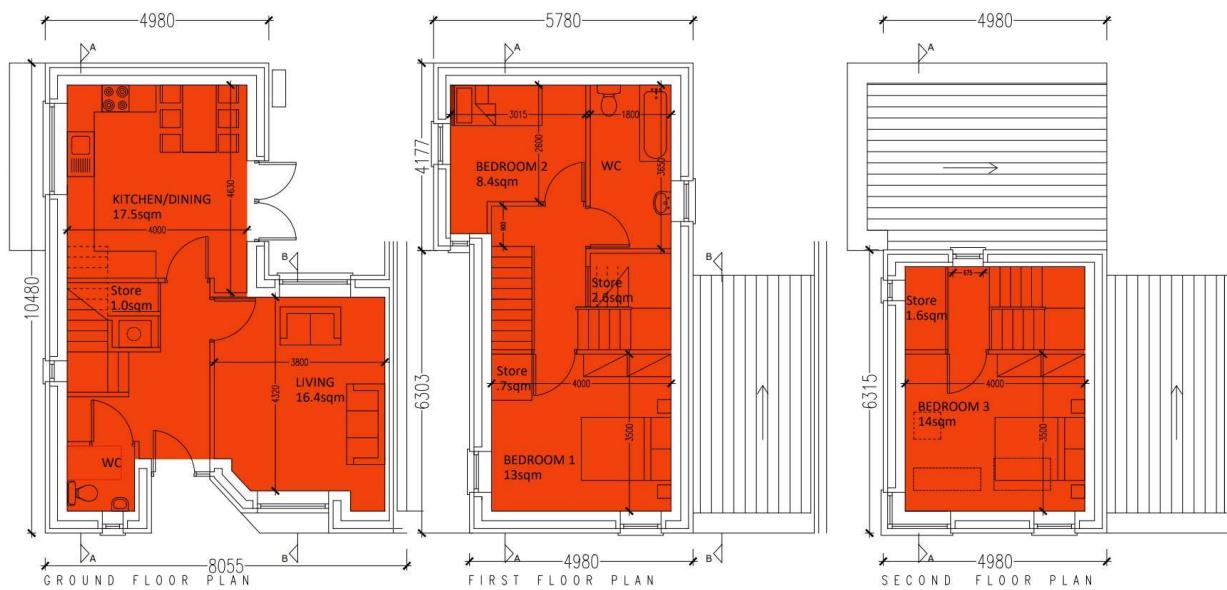
The Corners of terraces 1,2, 5 and 6 are inhabited with this house type.

The unit's typology has been arranged around an L-shape ground floor plan with Kitchen/Dining to the rear and Living room to the front overlooking the street.

This approach fosters an active street edge, provides passive surveillance, creates a stronger relationship between home and street and promotes pedestrian activity and safety.

The entrance is set back into the façade; the recessing of the area will help to shelter the occupants from rain when entering and will also help simplify roof construction.

The materials proposed for this house type will match those of House Types A and B.



Duplex Units

Terraces 1 and 2 are bookended by 3-storey corner units which comprise

- a ground floor, 2-bed apartment (highlighted in green on the floor plans below) and
- 2no. 2-bed duplexes overhead (marked in navy and purple below).

Both duplex homes have individual, own door access from the street.

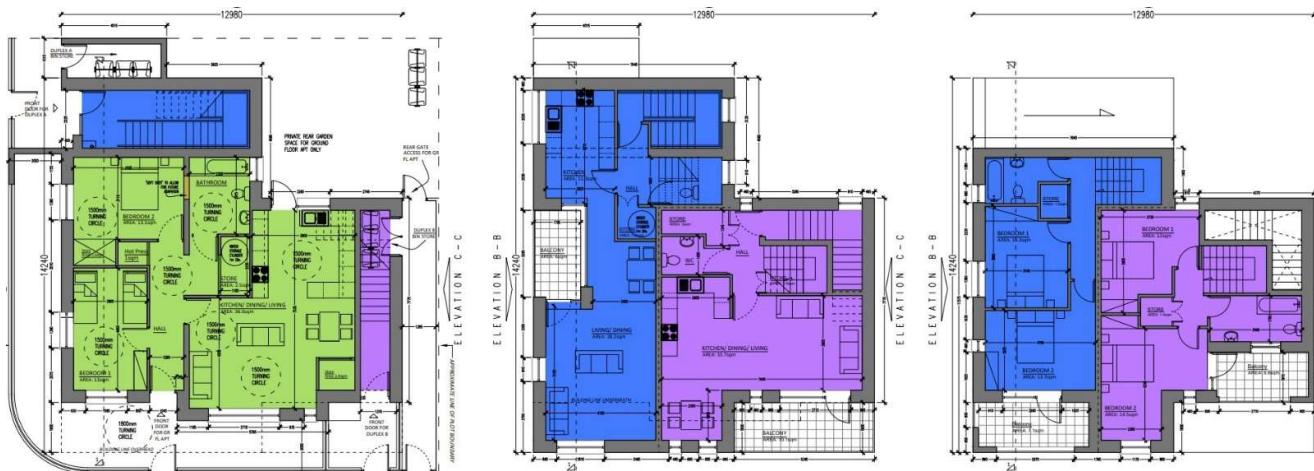
A mono-pitch roof clad in standing-seam/zinc is proposed to be used on these brick corner units. A paved surface as well as durable and resilient planting will be used to demarcate and define the privacy strip between the ground floor apartment and pavement. The units are to be set back 1.5 - 2m from the edge of the pavement. Both duplex units will have own-door access directly off the street.

The private open space of the duplexes will be recessed into the façade of the dwelling, with the areas meeting both the Development Plan and DHLGH recommendations.

The ground floor apartments will avail of the garden space to the rear.

A degree of permeability is applied to the massing of the corner Duplexes to allowing side access at both sides of the proposed 3-storey units.

The ground floor apartment complies with all of the relevant regulations regarding access. Indeed, the ground floor apartments will be designed to Universal Design standards, which will result in homes that can be accessed and used to the greatest extent possible by all people regardless of their age, ability, or disability.



4.0 Architectural Form & Context

The scheme has been designed with regard to the following regulations and guidelines

- Building Regulations
- Design Manual for Urban Roads and Streets (DMURS)
- Quality Housing for Sustainable Communities (QHfSC)
- Design Code & Public Realm Strategy for the CNWQR
- Cork City Development Plan

4.1 Massing

The massing of the proposed building forms is in keeping with those proposed in the Masterplan; 2-storey terraced dwellings and 3-storey corner units that address the street.

4.2 Density

The total site area is 11,167m²/ 1.167Ha and comprises 43 units. This results in a density of 37 units per Hectare. The masterplan calls for a density of not lower than 35dph.

4.3 Space Standards

The floor areas of the housing units are in compliance with those indicated in the Quality Housing for Sustainable Communities (QHfSC) document. All of the 3-bed, 2-storey units have a minimum of 60m² private open space.

All apartments are dual aspect, have a minimum floor to ceiling height of 2.7m and have own door access. All duplex units have own door access from the street with each 2-bed unit having a minimum of 8m² of private open space. Each of the ground floor apartments, in the corner units, has sole use of the rear garden space which measures 44m².

4.4 Boundary Treatment

Boundaries are to be formed with brick plinth walls and galvanised steel railings. The boundaries are designed to help create a unified and cohesive environment. All rear and side boundary walls are to be 1.8m high, capped and rendered blockwork walls. Increased pedestrian activity also has a traffic calming effect as it causes people to drive more cautiously.

4.5 Roads

All of the newly proposed roads within the scheme have been designated as Local Roads in the Masterplan and are to be designed using Shared Space principles as recommended in the DMURS document. These shared surface 'streets' will be designed to speeds of 10mph, with carriageways measuring 5m in width with 2.5m wide footpaths.

The key condition for the design of shared surface streets is that drivers, upon entering the street, recognise that they are in a shared space and react by driving very slowly.

This should be achieved through the use of well-designed signage and material selection for surfaces. A variety of materials and finishes, changes of direction, slight vertical deflections at junctions and pinch-points will be used to indicate that the carriageway is an extension of the pedestrian domain. Robust materials such as stone kerbing and HRA is proposed for the road surface, with HRA proposed for the footpaths alongside durable, site-suitable planting along verges, build-outs and privacy strips. Raised kerbs will be avoided and the corner radii reduced to 2.5m

4.6 Parking

A combination of off-street and on-street parking is proposed.

6no. units (courtyard) will be provided with parking within the curtilage of the dwelling, and the remaining units will avail of the on-street parking.

2no. of on-street spaces will be provided for disabled parking, as per Cork City Development Plan. The remainder of the units will have their parking requirements met through the provision of on-street parking along the new roads and streets. This parking will form part of an integrated public open space design, using shared space principles and will ensure that residents will have a parking space provided in front of/ within sight of their homes.

By bringing resident parking on to the street, it allows the building line of the proposed new housing to be brought closer to the public realm and footpath thus increasing passive surveillance and enclosure to the new public open space, all in line with the masterplan and DMURS street design principles. It will also help to avoid the scenario whereby parking dominates the interface between the building and the footpath.

4.7 Bin Storage

Bin storage is provided to the front of each dwelling, contained within a brick enclosure which is to be incorporated into the boundary wall.

This bin enclosure will have the capacity to house 3no. refuse bins and will be located along the adjoining boundary wall away from the front door.

Each individual apartment and duplex unit have their own separate bin storage area.

4.8 Part L-Sustainability

A reduced technological, fabric-first approach to sustainability and environmental responsibility is proposed. Walls, ground and roof levels will be super-insulated and all windows will be openable and supplied with trickle vents allowing for a controlled background ventilation.

4.9 Public Open Space

Phase 4a will avail of a large public open space, measuring 1900m2/ 0.19Ha, that is to be designed and developed as part of the next phase of development (Phase 5A as outlined in the Masterplan). This space will provide a much-needed amenity space for the neighbourhood as well as being instrumental in the integration of new dwellings with the existing.

4.10 Efficiency

It is envisaged that phase 4A of the masterplan will improve the area by utilising this existing under-developed site at the heart of the Knocknaheeny housing estate. The overall design is based on simple forms so as to minimise costs and ensure a timely completion date. The massing of the proposed units allows for limited modification to the rear of the units if required in the future.

The floor area of individual rooms will be consistent with the target areas as set out in the QHfSC document.

The residual space alongside the proposed terraces is being utilised through the introduction of 3-storey units, minimising the risk of antisocial behaviour and in return improving the surrounding area. The proposal considers the mature, suburban nature of the surrounding neighbourhood, and strives to enhance and respect the overall character of the area.