# 3 DESCRIPTION OF PROPOSED DEVELOPMENT

# 3.1 Introduction

This Chapter of the EIAR provides a description of the Proposed Development which will be assessed as part of the EIAR. Planning approval is sought from An Bord Pleanála, Section 8 of the Planning & Development (Housing) and Residential Tenancies Act 2016 (hereafter referred to as the Act).

The Description of Development provides details of this project which requires planning consent. It includes a description of the location of the project and its physical and environmental characteristics. The description of development as set out in this chapter is also set out in the following chapters prepared by consultants specialising in the environmental topics subject of the chapters.

In line with the EIA Directive a description of the application site, design, size and scale of development are also discussed within this chapter. Consideration is also given to all relevant phases of development from construction through to operation. This Chapter provides a broader summary description of the proposed development that is subject of this EIAR. The environmental impacts of the proposed development are then examined for each of the prescribed environmental topics discussed in turn under Chapters 5 - 16. A summary of the proposed mitigation measures are set out in Chapter 17: Summary of Mitigation Measures. The residual impacts of the proposed development are summarised under Chapter 18: Summary of Residual Impacts.

This Chapter of the EIAR has been prepared by Stephen Little & Associates Chartered Town Planners & Development Consultants.

# 3.2 Site Context & Location

The subject site is contained within a larger land parcel subject of South Dublin County Council's Kilcarbery-Grange Masterplan (c. 35 Ha). The lands are located approximately 2km west of Clondalkin village, and approximately 11km south west of Dublin City Centre.

The site is generally bounded by the Outer Ring Road / Grange Castle Road (R136) to the west, the Old Nangor Road (L5254) and Scoil Mochua and Spina Bilfida Hydrocephalus Ireland immediately to the north, the New Nangor Road (R134) beyond to the north, existing residential estate development to the north east and east of the PPP site, and Corkagh Demesne (public park) to the south.

The site is currently accessible via the Old Nangor Road to the north. The site is also accessible by foot via Corkagh Park Demesne to the south.



Figure 3-1: Extract from Google Earth illustrating an indicative outline of the proposed development (in red) within with the extent of the Kilcarbery – Grange Masterplan 2017 (Overlay by SLA).

The site is generally flat, with levels falling gently from its south western corner towards the north and eastern site boundaries. There is a significant quantum of existing mature trees and hedgerows, and a series of drainage ditches across the site.

The surrounding existing housing development to the north and east is generally of a low profile, suburban character.

## 3.3 Existing & Planned Uses

The application site comprises greenfield agricultural lands, with field boundaries defined by existing hedgerows and trees. The wider landscape opens towards Corkagh Park to the south.

The proposed land use is primarily residential. Ancillary retail and community uses are proposed in the north eastern part of the site, near to the future neighbourhood centre and education campus sites. Significant areas of public open space, green infrastructure networks and supporting physical infrastructure works are also proposed.

#### **3.4** General Description of Proposed Development

The proposed development subject of this SHD Planning Application will generally comprise: -

- 1,034 no. units (578 no. houses, 154 no. duplex / apartments and 302 no. apartments) ranging from 2 to 6 storeys, comprising the following: -
- 578no. own door houses, including: -
  - 449no. 3-bed 2-storey houses (House Type A, A1, A2, B, C, D, G & H).
  - 31no. 4-bed 2-storey houses (House Type E & J).
  - 98no. 4-bed 3-storey houses (House Type F & F1).
- 154no. own door duplex / apartments, in 3 to 4-storey buildings, including: -
  - 41no. 1-bed duplex / apartments (Type M1 & M2).
  - 49no. 2-bed duplex / apartments (Type K, N1 & N2).
  - o 64no. 3-bed duplex / apartments (Type L, L1, L2 & L3).
- 302no. apartment units accommodated in 9no. 4 to 6-storey buildings (with own door access ground floor apartments), including:
  - o Block 1 accommodating 29no. apartments (6no. 1-beds, 18no. 2-beds and 5no. 3 beds).
  - Block 2 accommodating 24no. apartments (4no. 1-beds, 15no. 2-beds and 5no. 3 beds).
  - o Block 3 accommodating 30no. apartments (13no. 1-beds and 17no. 2-beds).
  - o Block 4 accommodating 30no. apartments (13no. 1-beds and 17no. 2-beds).
  - Block 5 accommodating 45no. apartments (12no. 1-beds, 22no. 2-beds and 11no. 3-beds).
  - Block 6 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds).
  - Block 7 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds) Temporary creche at ground floor level to revert 7no. residential units on completion of permanent purpose-built creche in Phase 3.
  - o Block 8 accommodating 33no. apartments (5no. 1-beds, 23no. 2-beds and 5no. 3-beds).
  - o Block 9 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds).
- Private rear gardens are provided for all houses. Private patios / terraces and balconies are provided for all duplex and apartment units. Upper level balconies are proposed on elevations of all multi-aspect duplex and apartment buildings.
- Ancillary uses including the provision of 1 no. retail unit (c. 178 sq. m) and community building (c. 785 sq. m).
- 1no. temporary creche (c. 557 sq. m gross floor area in lieu of 7no. ground floor apartment units in Block 7 pending construction of permanent creche at Grange Square)
- 1no. permanent creche building at Grange Square (c. 909 sq. m gross floor area).
- New vehicular access from Outer Ring Road / Grange Castle Road (R136) to the west (left in and left out arrangement) and 2no. new vehicular access points onto Old Nangor Road (L5254) to the north and associated re-alignment of existing adjoining roadways.
- New street network, including spine road (c. 6m in width) extending from Outer Ring Road / Grange Castle Road (R136) to the west onto Old Nangor Road (L5254) to the north.
- New pedestrian and cycle path network.

- Provision of Public Open Space (c. 4.6 Ha) including: -
  - Oak Green Space (c. 7,453 sq. m).
  - Lime Green Space (c. 6,646 sq. m).
  - Grange Square (c. 2,606 sq. m).
- Provision of surface water attenuation measures (SuDs).
- Wastewater pumping station including 18hr storage tank and associated infrastructure.
- 1,510 no. surface car parking spaces.
- 1,105 no. covered bicycle parking spaces.
- Communal bin storage for all terraced houses, duplex / apartment and apartment blocks.
- All associated and ancillary site development, infrastructural, landscaping and boundary treatment works including bin storage.

Section 3.6 (below) provides a more detailed description of the characteristics of the Proposed Development.

## 3.5 Statutory Planning Context

The subject lands are subject to national, regional, sub-regional, county and local planning policy. The following outlines high level planning policy of relevance to the future development of the subject lands. This section will not address the detailed policies and objectives contained in the various plans which are relevant to the proposed residential development at Kilcarbery, as these are addressed in a separately bound Planning Report and Statement of Consistency prepared by Stephen Little & Associates Town Planners & Development Consultants which accompanies the SHD Planning Application.

#### 3.5.1 Rebuilding Ireland – Action Plan for Housing & Homeless

The stated aim of the Action Plan is to ramp up delivery of housing from its current undersupply across all tenures to help individuals and families meet their housing needs. Key to this is delivering housing in a way that meets current needs while contributing to wider objectives such as the need to support sustainable urban and rural development and communities and maximise the contribution of the built environment to addressing climate change. There are a number of pillars set out in the Action Plan, including: -

#### Pillar 2 – Accelerate Social Housing

"Increase the level and speed of delivery of social housing and other State supported housing."

#### Pillar 3 – Build More Homes

"Increase the output of private housing to meet demand at affordable prices."

The Kilcarbery site was identified as a Major Urban Housing Delivery Site (MUHDS) under the Action Plan. The proposed development will provide housing under both of the above stated pillars of the Action Plan by providing private residential development and 30% social and affordable housing as part of the Joint Venture agreement between SDCC and the Applicant.

We refer the Board to the Stakeholders Report, prepared by SDCC which provides and overview of the context and the rationale for the development of the Kilcarbery site as part of the Joint Venture with the Applicant.

#### 3.5.2 National Planning Framework – Ireland 2040

The National Planning Framework (NPF) recommends the consolidation of City's development and growth within the M50 and canals to create a more compact urban form. The NPF sees 40% of all new homes nationally being located within the existing built up area of existing settlements.

The NPF also sets out a number of National Policy Objectives (NPO) that seek to ensure that the overriding intent of the NPF is delivered. In the context of this proposal, it is considered that the following particular NPOs are worthy of mention: -

#### National Policy Objective 2a

"A target of half 50% of future population and employment growth will be focused in the existing five Cities and their suburbs."

#### National Policy Objective 3b

"Deliver at least half (50%) of all new homes that are targeted in the five Cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford within their existing built-up footprints."

#### National Policy Objective 11

"In meeting urban development requirements, there will be a presumption in favour of development that can encourage more people and generate more jobs and activity within existing cities, towns and villages, subject to development meeting appropriate planning standards and achieving targeted growth."

#### **National Policy Objective 27**

"Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments, and integrating physical activity facilities for all ages."

#### National Policy Objective 33

"Prioritise the provision of new homes at locations that can support sustainable development and at an appropriate scale of provision relative to location."

The proposed development will deliver a new plan-led residential neighbourhood at the edge of the Clondalkin Village on land zoned for residential use. As set out under Section 10.1 above, the Kilcarbery site has been identified under 'Rebuilding Ireland' as a MUHDS to facilitate the development of a significant residential scheme which is consistent with the aspirations of the NPF.

## 3.5.3 Eastern and Midlands Regional Spatial & Economic Strategy

The Regional Spatial and Economic Strategy (RSES) for the East and Midlands (including the Dublin Metropolitan Area Strategic Plan – MASP) was adopted on 3 May 2019 Eastern & Midlands Regional Assembly. The RSES for the East and Midlands is due to come into effect on 28 June 2019. This provides regional level strategic planning policy for the eastern and midland region, and Dublin, in line with the NPF. Dublin comprises Dublin City and Metropolitan Area.

Section 5.4 of the RSES sets out an overview of the MASP area which identifies a number of key corridors for future development which identifies the Kilcarbery site, noting: -

#### South western Corridor (Kildare line and DART expansion programme, N81 and Luas redline)

"The consolidation and western expansion of the city can be achieved through the development of strategically located sites at Clonburris, Kilcarbery and Adamstown SDZ, linked to increased capacity and electrified services on the Kildare rail corridor, to be delivered by 2027, with employment lands at Grangecastle supported by additional bus connections. There is further capacity for regeneration of major brownfield lands at Naas Road, Tallaght and to create new residential communities at Fortunestown near to the emerging town of Saggart/Citywest, served by the LUAS redline."

The proposed development is located at the strategic lands at Kilcarbery identified in the RSES for a new residential community, at the edge of Clondalkin.

At this location the proposed scheme is representative of plan-led development, that delivers significant additional public and private housing in a range of house types in a consolidated, accessible urban neighbourhood. Proposed sustainable housing development will be supported by ancillary and associated community facilities and significant public open space and green infrastructure links.

## 3.5.4 South Dublin County Development Plan 2016 – 2022

Under the Development Plan the subject site has primarily been zoned Objective 'RES-N', the objective of which is: -

"To provide new residential communities in accordance with approved area plans."



Figure 3-2: Extract from Development Plan Zoning Map 4 of the Development Plan showing the subject site outlined in red (SLA overlay).

The type of uses proposed (residential, childcare, ground floor commercial or community uses and amenity spaces) are either 'Permitted in Principle' or 'Open for Consideration' under the 'RES-N' zoning objective. The residential and ancillary uses proposed are fully compliant with the overarching zoning objective for the subject lands.

## 3.5.5 Kilcarbery – Grange Masterplan 2017

The design and layout of the proposed development on the subject lands has been guided by the Masterplan prepared by South Dublin County Council entitled the Kilcarbery – Grange Masterplan (2017).

The vision of the Kilcarbery – Grange Masterplan (2017) is stated as: -

"The vision for the masterplan is to realise a distinct high quality sustainable place with a local sense of character and community, which is closely connected to its own and its surrounding landscape and provides for a range of community needs, within an attractive, permeable and connected urban structure."



**Figure 3-3:** Extract from the Site Layout Plan prepared by Burke Kennedy Doyle showing compliance with the Kilcarbery – Grange Masterplan Layout.

The proposed Masterplan / Site Layout, prepared by Burke Kennedy Doyle Architects (Dwg. No. 6168-005 'Site Layout Plan') provides a fully compliant layout which has regard for: -

- Integration with site context and landscape features.
- Permeability and legibility of streets and spaces, and connectivity to facilities and amenities in the surrounding area.
- Green network of landscape corridors and spaces, that benefit from appropriate passive supervision, and biophilic design to promote human health and well-being.
- Careful consideration of continuity, enclosure, scale, visual interest, identity, character and boundary conditions.
- To provide primarily residential units, but with potential for non-residential ground floor uses in ground floor units where appropriate.
- Good mix of dwellings and high quality residential design standards.

#### **3.6** Characteristics of the Proposed Development

The SHD Planning Application to An Bord Pleanála is accompanied by detailed drawings and a detailed design statement, prepared by Burke Kennedy Doyle Architects, which provides a rationale for the design of the proposed scheme and the dwelling types proposed.

#### 3.6.1 Layout & Design

The design proposes the integration of the Council's Kilcarbery Masterplan structure of open spaces and green loops into a hierarchy of streetscapes: formal avenues, side-streets and biophilic streets, expanding on the network of existing hedgerows, tree lines and water courses. A network of health and amenity routes in naturalised planted surroundings is proposed, promoting walking, jogging, cycling, exercise, play and enjoyment.

The architectural massing and treatment is intended to form a contrast between formal building lines with strongly defined edges, parapets and corners and the organic landscape setting.

The building treatment in the different character areas derives from the natural characteristics of the tree species, interpreted through the use of a range of subtly different material and façade treatments.

A holistic design process has informed the design, including architecture, landscaping, servicing, drainage, sustainable transportation, energy management and NZEB design, with the intention of delivering a healthy, integrated and natural urban environment, fostering a sense of community and promoting the physical and mental well-being of all the residents.

## 3.6.2 Density

The net residential density of the proposed development will be 42no. units per Ha, based on a net developable site area of 24.47 Ha, and a total of 1,034no. residential units to be provided in the scheme.

In response to ABP Opinion at Pre-Planning Consultation of the SHD process a robust rationale with regard the density achieved has been set out in the Planning & Statement of Consistency report, prepared by Stephen Little & Associates Chartered Town Planners & Development Consultants.

## 3.6.3 Unit Mix & Tenure

1,034 no. residential units are proposed in this case, including a mix of 24no. different unit types. These range from apartments, duplexes and houses. The development includes 578no. houses (detached, semi-detached and terraced), 351no. apartment units and 105no. duplex / apartment units.

The proposed development includes a range of housing typologies to cater for a diverse range of household sizes, generally consisting of: -

- 13.7% 1 bed units.
- 21.6% 2 bed units.
- 52.1% 3 bed units.
- 12.4% 4 bed units.

Overall, the housing typologies proposed, and the associated mix of unit sizes is consistent with the Development Plans objective to encourage a wide variety of housing types, sizes and tenures which will support the establishment of sustainable residential community.

## Part V – Social & Affordable Housing

30% of the overall residential units will be provided for social housing purposes, as part of the tenure mix for the proposed development. The social units will be transferred to the ownership of South Dublin County Council.

There has been extensive dialogue between the Applicant and South Dublin County Council Housing Department on the delivery of social housing within this scheme, as part of the tender process and in the period prior to making this Planning Application.

30% amounts to 310no. social units to be delivered to meet the Applicant's Part V obligations. These will include a mix of 3 and 4 bed houses, 1 and 2 bed duplexes and 2 bed apartments.

#### 3.6.4 Building Height

The proposed development complies with the building height typology envisaged by the Kilcarbery Grange Masterplan (2017).

5 to 6 storey buildings are located away from the eastern boundary with established low rise houses, and focussed in locations where they will animate key spaces (including Corkagh Park), main roads and gateways to the development.

Medium and lower scale 2 – 3 storey buildings will be located in local streets and spaces.

## 3.6.5 Drainage Infrastructure & Flood Risk

The Kilcarbery Grange Masterplan (2017) seeks the implementation of a range of infrastructural development to facilitate the residential development on these lands. In accordance with the provision of the Kilcarbery Grange Masterplan (2017) the proposed development includes: -

#### Waste Water

The proposed foul pumping station is to be located on the south side of the proposed spine road alongside a greenspace (in accordance with the requirements of Irish Water Code of Practice for Wastewater Infrastructure) and constructed in accordance with Irish Water Standard Details.

The pumping station will service the northern portion of the site and will accommodate 18 hours of emergency storage. The rising main discharge manhole will then combine downstream with the remaining gravity network for the southern portion of the site before discharging to the existing public sewer in Corkagh Park.

The proposed foul drainage network comprises a series of 225mm and 300mm diameter pipes, discharging to the pumping station described above. Each residential unit is serviced by individual 100mm diameter connections.

As part of the enabling phase of the development and in advance of any housing construction the core waste water infrastructure will be installed. This will include the following main elements: -

- A sewer connection with the exiting Irish Water Sewer to the south of the subject site.
- Installation of the main gravity collector section up to the proposed outfall point from the rising main.
- The installation of the rising main and discharge manhole including connection to the gravity section.
- The installation of the pumping station and inlet pipes extending to development phase 1.
- Wastewater drainage networks will also be constructed as part of the access road construction for the phase 1 housing building.

The Infrastructure Design Report and Foul Drainage Drawings, prepared by DBFL Consulting Engineers which provides a more detailed breakdown of the phasing of the foul drainage.

## Surface Water

Although the site will be managed as a whole, there are two proposed discharge points from the site. Lands generally to the north of the site, together with a portion of the run-off from the main spine road, will be directed to an existing 450mm diameter drain within the Old Nangor Road at the junction of Kilcarbery Avenue. The remainder of the site will be directed to an agreed outfall drain in Cherrywood Crescent that ultimately discharges to the Camac River downstream. Each catchment is subdivided into manageable sections with SuDS elements, controls, final treatment and attenuation measures provided on route and in advance of ultimate discharge to the proposed outfall locations. Further detail is provided subsequently.

To manage surface water in the interim, and while the development is being progressed, temporary attenuation areas will be established in the permanent locations as part of the overall earthworks plan for the site. This will involve the creation of a temporary drainage network of ditches and land drains that will be directed to the attenuations areas where the additional volumes can be managed until the permanent system is fully operational developed.

Each phase will create a temporary holding pond at exit for discharge of waters that will be connected to the permanent systems as works progress (See Dwg. No. 170191-1010-01 'Phasing Plan Drainage (Surface Water & SuDs)' and Infrastructure Design Report, prepared by DBFL Consulting Engineers for further detail).

## Flood Risk

A Site Specific Flood Risk Assessment, prepared by DBFL Consulting Engineers and accompanies this SHD Planning Application. The Report generally concludes that that all proposed dwellings are located in Flood Zone C as defined by the Guidelines (i.e. where probability of flooding from rivers is low).

## 3.6.6 Landscape Proposal

Ronan MacDiarmada Landscape Architects, have formulated a detailed landscape strategy for the proposed development. The proposed landscape scheme is a key component of the integration of the new building environment with the existing and proposed landscape conditions.

The design concept for proposed development is to create a 'biophilic' urban form, where buildings are carefully fitted into the existing landscape, promoting a sense of health and well-being. The proposed site layout develops the Kilcarbery – Grange Masterplan (2017) structure of open spaces and green loops into a hierarchy of streetscapes: formal avenues, side-streets and biophilic streets. This sets up a network of health and amenity routes in naturalised surroundings, promoting exercise and enjoyment.

At a basic level, in compliance with the Kilcarbery – Grange Masterplan (2017) three focal green spaces are provided, one serving each of the three residential character areas – Lime, Sycamore and Oak. A landscaped space is also proposed at the interface with the Neighbourhood Centre site to the north east (noting that the Neighbourhood Centre is outside the red line area and not part of this application).

The spaces are linked by the Green Infrastructure loop, that integrates the existing mature trees and hedgerows currently defining the existing field boundaries. A green buffer is also envisaged along the southern boundary with Corkagh Park. A more formal condition is envisaged along the Outer Ring Road boundary to the west.

## **Character Areas**

The design of the proposed development is arranged as a series of distinct character areas, which will be defined by variations in unit types and design, road layout and hierarchy and related open spaces. The Character Area Booklet, prepared by Ronan MacDiarmada Landscape Architects provides details of the character areas proposed in terms of their varying architectural design, layout and materiality.

## 3.6.7 Open Space Provision

The landscape proposal for the Proposed Development is based upon maximising the integration of existing natural features and providing functional green spaces and green links to serve both the prospective new residential community and also the existing wider surrounding linked residential areas.

#### **Public and Communal Open Space**

The proposed development includes the provision of c. 4.6 Ha of public open space, including: -

- Oak Green Space (c. 7,453 sq. m).
- Lime Green Space (c. 6,646 sq. m).
- Grange Square (c. 2,606 sq. m).

Communal open spaces have been provided to serve all apartment blocks, in the form of courtyards / communal terraces. The communal open space amounts to 6,157 sq. m in total.

#### **Private Open Space**

The houses proposed within the scheme are provided with private open space in accordance with the standards set in the Quality Housing for Sustainable Communities (2007).

The proposed apartments and duplexes are provided with private open space in accordance with the Sustainable urban housing: Design Standards for New Apartments (2018).

The compliance of the scheme with these standards is demonstrated within the Housing Quality Assessment prepared by Burke Kennedy Doyle Architects.

#### 3.6.8 Access

The proposed development includes the development of an internal road network, with a clear hierarchy of streets, each of which provides for cycle and pedestrian safety and access. The proposed scheme itself has been designed so as to be highly permeable, ensuring ease of circulation throughout and easy access to proposed areas of public open space and local centre facilities.

The Proposed Development delivers: -

- New vehicular access from Outer Ring Road / Grange castle Road (R136) (left in left out arrangement) to the west and 2no. new vehicular access points onto Old Nangor Road (L5254) to the north and associated works to existing adjoining roads.
- Hierarchy of key streets, spaces and urban blocks providing a high degree of permeability, based on DMURS principles.
- Appropriate frontage to boundary conditions at the Grange Avenue (spine road), the Outer Ring Road, Corkagh Park, the Green Loop. More intimate conditions to local streets and spaces.
- Linkage to the Corkagh Demesne Park to the south.

#### 3.6.9 Car Parking

In total, 1,510no. car parking spaces are proposed as part of the overall development. We refer to the Traffic and Transport Assessment Report, prepared by DBFL Consulting Engineers which sets out the rationale for the proposed quantum of car parking.

Car parking for the proposed houses and apartments amounts to 1,480no. spaces. This proposed provision is approximately 14% below the <u>maximum standard</u> set out in the South Dublin County Development Plan, and therefore compliant. The Apartment Design Guidelines 2018 further support the reduction of car parking standards for apartments where appropriate.

The remainder of the proposed car parking spaces are allocated to the associated supporting uses, including the temporary and permanent creche, retail unit and community building.

#### 3.6.10 Bicycle Parking

In total, 1,105no. bicycle parking spaces are proposed as part of the overall development to serve apartments / duplexes. Bicycle parking for house can be readily accommodated in the associated private gardens.

#### 3.6.11 Ancillary Uses

#### Creche

A temporary creche (557 sq. m) will be developed in Phase 1 within the ground floor of Apartment Block 7 to address the potential childcare demands of the initial phases of development. This will ultimately be replaced with the proposed purpose built creche at Grange Square, and the space will be revert to 7no. ground floor apartment units.

A purpose built permanent creche (909 sq. m) will be constructed at Grange Square in Phase 3, or earlier if the Board sees fit to attach alternative phasing conditions. The proposed permanent creche is adequately sized and serviced to absorb the potential childcare demands of this new residential community. A Childcare Needs Assessment, prepared by Stephen Little & Associates Chartered Town Planners & Development Consultants accompanies the SHD Planning Application to the Board.

Once the permanent creche becomes operational the use of the temporary creche will cease and the space will be converted to 7no. ground floor apartments (accounted for in the residential schedule of accommodation and the description of development).

#### **Community Building**

The community building will be developed at Grange Square, also in Phase 3. It is anticipated that there will be synergies of use between the creche and community building, in terms of end users and shared events / gatherings.

The community building and the purpose built creche being developed in Phase 3 ensures that there is sufficient critical mass of population by that time to support the viable operation of these facilities and to create activity around the public square.

## **Retail / Commercial**

The retail unit will be developed in Phase 4. This is to ensure that there is sufficient critical mass of population and demand for the retail units to be considered a viable prospect for potential end users.

## 3.6.12 Phasing

It is proposed that the development will be delivered in 4no. phases, which have been set out on the accompanying phasing drawing (Dwg No. 6168-003 'Phasing & Tenure Mix Plan') prepared by Burke Kennedy Doyle Architects.

**Phase 1** – The first phase of development provides for the delivery of 289no. residential units comprising a mix of houses, apartments and duplex units, along with the largest area of open space in the east of the site (Oak Green space), other associated liner green spaces and a temporary creche facility in Apartment Block 7. This first phase of development will also provide the 'Spine Road' and the foul pumping station and the associated surface water management network.

**Phase 2** – The second phase of development provides for 246no. residential units, which also includes a broad range of dwelling sizes and typologies. This phase will also include associated liner green spaces between Oak Green space and Lime Green space.

**Phase 3** – The third phase of development provides for 291no. residential units, which also includes a broad range of dwelling sizes and typologies. This phase will also include the community building, and permanent purpose built creche and the second largest open space (Lime Green space).

**Phase 4** – The final phase of development provides for 208no. residential units, which also includes a broad range of dwelling sizes and typologies. This phase will also include the retail units on the ground floor of Apartment Block 2 and final remaining linear green areas.

# 3.7 Existence of the Proposed Development

The purpose of this section is to provide a description of the proposed development and consider all relevant aspects of the project life cycle both during construction and post construction (and decommissioning if applicable). These include the following: -

- Construction Stage (Land Use Requirements, Construction Activity & Significant Effects).
- Operation Stage (Processes, Activities, Materials Used).
- Secondary and Off-Site Developments.

# 3.7.1 Construction Phase

A 10 Year Planning Permission is being sought from An Bord Pleanála. A determination on the application is expected from An Bord Pleanála in Q4 2019.

Allowing a reasonable period for mobilisation and site set up, it is expected that works will commence in Mid-2020, subject to grant of permission and the discharge of any precommencement planning conditions.

The Construction Phase will commence in mid to end 2020 with the projected completion of the buildings by 2028 (this will be subject to a range of factors). See Section 1.2 of the Planning Report & Statement of Consistency, prepared by Stephen Little & Associates Chartered Town Planners & Development consultants which provides a rationale for the lifetime of the permission sought.

## 3.7.1.1 Construction Stage

As noted previously, the construction of this development is likely to take place in 4no. phases of development as described below: -

- Site Development Works Access, site clearance.
- Phase 1 The first phase of development provides for the delivery of 289no. residential units comprising of a mix of houses, apartments and duplex units, along with the largest area of open space in the east of the site (Oak Green space), other associated liner green spaces and a temporary creche facility in Apartment Block 7.

This first phase of development will also provide the 'Spine Road' and the foul pumping station and the associated surface water management network.

- Phase 2 The second phase of development provides for 246no. residential units, which also includes a broad range of sizes and typologies. This phase will also include associated liner green spaces between Oak Green space and Lime Green space.
- **Phase 3** The third phase of development provides for 291no. residential units, which also includes a broad range of sizes and typologies. This phase will also include the community building, and permanent purpose built creche and the second largest open space (Lime Green space).
- **Phase 4** The final phase of development provides for 208no. residential units, which also includes a broad range of sizes and typologies. This phase will also include the retail units on the ground floor of Apartment Block 2 and final remaining linear green areas.

The Contractor will be required to prepare a detailed Construction Management Plan, including traffic management, on foot of these phasing proposals.

In relation to surface water management, each phase will create a temporary holding pond at exit for discharge of waters that will be connected to the permanent systems as works progress (See Dwg. No. 170191-1010-01 'Phasing Plan Drainage (Surface Water & SuDs)' and Infrastructure Design Report, prepared by DBFL Consulting Engineers for further detail).

## 3.7.1.2 Construction Activities

There are a number of construction activities involved in a project such as this. The activities (independent of phasing) can be divided into five general categories: -

- **Excavation:** This includes site clearing and earthworks soil / rock removal required to prepare the site for the foundations and residential floorspace above.
- **Structure:** Structure includes the foundations and the physical frame of the residential units and childcare facility.
- **Enclosures:** The enclosures for the buildings will be formed from brick, block work, timber, and glass, with slate roofs, all with the required levels of insulation and water proof membranes.
- Services: The requisite services will be provided including drainage and lightning.
- Landscaping: The landscaping works include some hard landscaping, roads, footpaths, cyclepaths, bed and tree planting, and significant open spaces. In addition, there are a number of existing trees and areas of woodland to be protected on site and incorporated into the new scheme.

#### 3.7.1.3 Air Quality – Dust & Dirt

The appointed Contractor shall put in place a regime for monitoring dust levels in the vicinity of the Site during the Construction Phase. The level of monitoring and adoptions of mitigation measures will vary throughout the Construction Phase depending on the type of activities being undertaken and the prevailing weather conditions at the time

The potential impacts associated with air quality during the Construction Phase are addressed in Chapter 9: Climate (Air Quality & Climate Change).

## 3.7.1.4 Noise & Vibration

It is not envisaged that any significant prolonged noise and vibration producing activities will be carried out onsite.

The potential impacts associated with noise and vibration during the Construction Phase, are addressed in Chapter 12: Air (Noise & Vibration).

## 3.7.1.5 Waste

A Construction & Environmental Waste Management Plan, prepared by DBFL Consulting Engineers has been prepared and are included with the SHD Planning Application. In addition, Chapter 15: Material Assets (Waste) of this EIAR includes details regarding the anticipated amounts of waste generated from the project, the subsequent potential impacts and the mitigation measure proposed to ameliorate any anticipated negative impacts.

In summary, all waste generated during the construction and operational periods is proposed to be appropriately disposed of in accordance with the Waste Management Plans.

#### 3.7.1.6 Health & Safety Issues

The development will comply with all Health & Safety Regulations during the construction of the project. Where possible potential risks will be omitted from the design so that the impact on the construction phase will be reduced.

## 3.7.2 Operational Phase

The proposed development comprises a new residential neighbourhood, comprising a range of house types and sizes, and ancillary community and retail facilities, accommodated in buildings ranging from 2 to 6 storeys in height. Site development works including the provision of the 'Spine Road' and the foul water pumping station and associated emergency storage are also included as part of the proposed scheme to facilitate this development.

The primary direct significant environmental effects will arise during the Construction Phase. The Operational Phase of the proposed Project is expected to be relatively benign and not likely to give rise to any significant additional environmental impacts in terms of activities, materials or natural resources used or effects, residues or emissions which are likely to have a significant impact on human beings, flora and fauna, soils, water, air and climate.

The primary likely significant environmental impacts of the Operational Phase as a result of the proposed Development are fully addressed in the relevant specialist chapters of this EIAR. These impacts relate to Population & Human Health, Landscape & Visual, Climate (Noise & Vibration) and Climate (Air Quality & Climate Change) associated with the traffic generated.

The proposed Development also has the potential for cumulative, secondary and indirect impacts (i.e. traffic). These can be difficult to quantify due to complex inter-relationships. However, interactions and cumulative impacts are unlikely to be significant. These are addressed in Chapter 19: Summary of Cumulative Impacts and Interactions – of this EIAR.

## 3.7.3 Description of Secondary and Off-Site Developments

No significant secondary enabling development is deemed necessary to facilitate the proposed development .

The SHD Planning Application includes details of the necessary road works, water supply and drainage, foul pumping station and associated storage tank, which are required to facilitate this development. These site works are assessed within this EIAR.

## 3.8 Related Development and Cumulative Impacts

Each Chapter of the EIAR includes a cumulative impact assessment of the proposed Development with other planned projects in the immediate area. The potential cumulative impacts primarily relate to traffic, dust, noise and other nuisances from the construction of the development, with other planned or existing projects, and each of the following EIAR chapters has regard to these in the assessment and mitigation measures proposed.

As such, with the necessary mitigation for each environmental aspect, it is anticipated that the potential cumulative impact of the proposed development in conjunction with the other planned developments will be minimal.