# 3 Description of Development

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# 1.1 Introduction

# This chapter of the EIAR has been prepared by Brock McClure and the applicant.

It provides a detailed description of the project along with details of the existing environment.

In accordance with Article 5(1)(a) of the 2011 Directive as amended by Directive 2014/52/EU the description of the proposal should comprise "...information on the site, design, size and other relevant features of the project".

The following build - to - rent residential development is provided:

The current proposal provides for a Build to Rent development consisting:

- 468 residential units (452 apartments and 16 houses) as follows:
  - 41 no. studio apartment units,
  - o 257 no. 1 bed apartment units,
  - 136 no. 2 bed apartment units;
  - 18 no. 3 bed apartment units;
  - o 10 no. 3 bed semi-detached house units; and
  - 6 no. 1 bed bungalow units.
- A café / restaurant of c. 140 sq m; office space of 149 sq m; concierge of c. 149 sq m; and a residential tenant amenity space of c. 458 sq m is also proposed.
- 274 Car Parking Spaces (273 at basement level and 1 at surface level)
- 12 Motor Cycle Spaces
- 616 Bicycle Parking Spaces
- Public Open Space
- Vehicular Access
- Basement Areas
- 3 Sub Stations and 3 Switch Rooms
- All Associated Site Development Works



Figure 3.1 - Site Layout

A more detailed description is set out below.

# 1.2 Characteristics of Development

Schedule 6 para. 2(a) requires information on the site, design size and "other relevant features" of the proposed development.

We set out below the details of the site and relevant design features.

# Site Location



#### Figure 3.2 - Site Location

The site extends to c. 2.14 ha on vacant lands bounded to the north/east by the N11, to the south/east by Willow Grove housing, to the south/west by Cornelscourt Village Centre and to the north/west by AIB lands. Vehicular access to the site is provided via the Old Bray Road. The land use context in the vicinity of the site ranges from residential to commercial including a Service Station, offices, shops and restaurants.

The site is well located in terms of access to public transport. It is directly bounded by the N11 QBC with bus services to the City Centre running every 6 minutes on average. The N11 route also features dedicated cycle tracks connecting to the wider cycle network throughout the county. The nearest LUAS stop is located at Carrickmines Park & Ride (c. 1.8km).

## Existing Land Use

The proposed development will be located on greenfield at lands Cornelscourt Village, Old Bray Road, Cornelscourt Dublin 18.

The surrounding area can be characterised as a mostly suburban environment.

The site is identified by the relevant statutory context as being capable of accommodating residential development of the form and quantum currently proposed, by way of the residential zoning governing the site. A portion of the site is also zoned for neighbourhood centre uses. We are of the opinion that the proposal will not have any significant effect on the surrounding land uses in that the proposed development has been designed to integrate with surrounding development. Specifically, residential amenities both within the development and adjacent to the site are protected and maintained.

# Size, Design and Appearance of the Project

The extent of the development is set out below.

The proposed development shall provide for the construction of a new residential development of 468 no. units in the form of 452 no. apartment units (41 no. studio apartment units, 257 no. 1 bed apartment units, 136 no. 2 bed apartment units; and 18 no. 3 bed apartment units) and 16 no. house units (10 no. 3 bed semi-detached house units and and 6 no. 1 bed bungalow units). A café / restaurant of c. 140 sq m; office space of 149 sq m; concierge of c. 149 sq m and central residential tenant amenity space of c. 458 sq m is also proposed.

The following build - to - rent residential development is provided:

- 1. 452 build to rent apartment units (ranging from 1 12 storeys in height) in the form of 8 no. new residential blocks (Blocks A H) as follows:
  - Block A (8 12 storeys) comprising 134 no. apartments (12 no. studio units, 93 no. 1 bed units and 29 no. 2 bed units);
  - Block B (2 9 storeys) comprising 103 no. apartments (18 no. studio units, 65 no. 1 bed units; 14 no. 2 bed units and 6 no. 3 bed units);
  - Block C (6 7 storeys) comprising 82 no. apartments (6 no. studio units, 60 no. 1 bed units and 16 no. 2 bed units);
  - Block D (5 storeys) comprising 36 no. apartments (1 no. studio unit, 5 no. 1 bed units; and 30 no. 2 bed units);
  - Block E (4 storeys) comprising 29 no. apartments (4 no. 1 bed units; and 25 no. 2 bed units);
  - Block F (2 4 storeys) comprising 56 no. apartments (4 no. studio units, 24 no. 1 bed units; and 16 no.

2 bed units and 12 no. 3 bed units);

- Block G (3 storeys) comprising 6 no. apartments (3 no. 1 bed units and 3 no. 2 bed units); and
- Block H (3 storeys) comprising 6 no. apartments (3 no. 1 bed units and 3 no. 2 bed units).
- 2. 10 no. 3 bed semi-detached houses (2 storey) and 6 no. 1 bed bunaglows (1 storey) are proposed.

Adjacent to the existing pedestrian and vehicular access point from Old Bray Road there will be a café/restaurant of 140 sq m and residential amenity area at ground and first floor providing resident support services and concierge services of 149 sq m. At first floor level is a proposed commercial office space of c. 149 sq m. Located centrally within the development attached to the southern gable of Block B there is a two storey residential amenity space of c. 458 sq m; providing for resident support facilities and amenities including reading room, lounge, gym and terrace.

Each residential unit will be afforded with private open space in the form of a balcony/terrace/roof terrace or private rear garden area. Public open space is also proposed in the form of external residential amenity spaces, play areas, courtyards and gardens. Provision is also made for a pedestrian connection to Willow Grove.

274 car parking spaces (273 at basement level and 1 at ground level), 616 bicycle parking spaces (512 at basement level and 104 at ground level) and 12 motorcycle spaces (12 at basement level) are proposed.

Basement areas of c. 9,024 sq m are proposed (Level -1) and include car parking, waste management areas and plant areas. 3 no. ESB substations and 3 no. Switch Rooms (c. 77 sq m combined) are proposed at ground level.

The development shall be served via the existing vehicular access point from the Old Bray Road. Upgrade works are proposed to this vehicular access point to facilitate the proposed development and to provide for improved access and egress for the overall development.

The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works; boundary treatment; internal roads and footpaths; and electrical services.

We note at this time that the 'Construction Management Plan' prepared by DBFL Consulting Engineers provides a robust strategy for the storing, handling, collection and transport of the wastes generated on site during construction and applies appropriate mitigation measures.

In addition, there is a 'Construction Phase Waste and By Product Management Plan' and 'Operational Phase Waste Management Plan' prepared by Byrne Environmental enclosed with the planning application.

# **Density**

Residential Density proposed at this site is set out as 468 units on a 2.05 ha site (development site area excluding portion of the site along the N11 for the pedestrian /cycle link). This equates to 229 units per ha and is considered appropriate given the proximity of the site to public transport at the N11 bus corridor and the presence of the Green Luas line 1.8km from the site. A density of this nature is supported by national policy which is aiming to deliver increased height and densities at appropriate locations.

## <u>Height</u>

Block	Height
Block A	8-12 storeys
Block B	2-9 storeys
Block C	6-7 storeys
Block D	5 storeys
Block E	4 storeys
Block F	2-4 storeys
Block G	3 storeys
Block H	3 storeys
Bungalow Houses	1 storey
Semi Detached Houses	2 storey

The new build element of the proposal ranges in height from 2 - 12 storeys as follows:

#### Table 3.1 Building Heights

As set out in accompanying planning documentation, the heights proposed are supported by national policy and are reflective of existing heights along the N11 corridor.

## Land Use Requirements

A total of 468 residential units are proposed in 8 Blocks (Blocks A - H).

Residential Mix consists 468 residential units (452 apartments and 16 houses) as follows:

- 41 no. studio apartment units,
- o 257 no. 1 bed apartment units,
- o 136 no. 2 bed apartment units;
- 18 no. 3 bed apartment units;
- o 10 no. 3 bed semi-detached house units; and
- 6 no. 1 bed bungalow units.

A total of 259 of the 468 units proposed have the benefit of dual aspect equating to 55.3% of the units.

Heights of up to 12 storeys are proposed and these heights are considered appropriate to the site and surrounding context, having regard to proximity of the site to a public transport corridor; the prominence of the site along the N11; and current national planning policy direction.

The site is identified by the relevant statutory context as being capable of accommodating residential development of the form and quantum currently proposed, by way of the residential zoning governing the site. We are of the opinion that the proposal will not have any significant effect on the surrounding uses and that the proposed development has been well designed internally to ensure that residential amenities within the development are protected.

## Access

## Vehicle Access – Old Bray Road

As detailed in Infrastructure Design Report prepared by DBFL, the primary access point for motorised vehicles is from Old Bray Road. This access route also serves the AIB carpark (north-west of the site). Refer to DBFL Drawings 180208-XX-XX-DR-C-2001 & 180208-XX-XX-DR-C-2002 for the proposed site access layout.

This serves as the vehicular access route to the basement carpark and to the podium area and provides a more formalised access when compared to the existing access arrangements for the AIB carpark.

The ten houses proposed along the eastern boundary and 6 bungalows proposed along the western boundary are also accessed from Old Bray Road via the basement carpark.

The Old Bray Road has a posted speed limit of 50 km/hour. The site entrance complies with minimum visibility splays as required by DMURS (Y Distance = 45m, X Distance = 2.4m).

Line marking is provided in accordance with the Department of Transport's Traffic Signs Manual.

## Pedestrian and Cycle Access

Pedestrians and cyclists can primarily access the development via the proposed access from Old Bray Road (as described above). Pedestrian access is proposed on the southern side of the site access leading towards the podium area.

A dedicated cycle / pedestrian access route is provided along the site's north- western boundary which facilitates the following:

- Cycle access from Old Bray Road to basement bicycle parking areas.
- Cycle access from the basement to the existing cycle track located along the N11.

• Pedestrian access from the podium to the proposed footpath along the N11 (this proposed footpath along the N11 aligns with objectives in the Bus Connects Emerging Preferred Route for Bray to the City Centre).

We note that the cycle / pedestrian route is facilitated along the site's north-western boundary (to the N11) is completely separate from the vehicle access ramp to the basement.

A cycle / pedestrian link is also facilitated at the eastern corner of the site (linking the proposed development to the existing park at the northern end of Willow Grove).

The proposed pedestrian and cycle linkages noted above are shown on DBFL Drawing 180208-XX-XX-DR-C-2001.

# Private Open Space Provision

## Apartments

All residential apartment unit will be afforded with private open space in the form of a balcony or terrace. All balconies proposed have a minimum depth of 1.5m. In the majority of cases, all balconies are accessed off the living spaces and where possible also include access from a bedroom.

The Housing Quality Assessment enclosed herewith (prepared by Henry J Lyons Architects) confirms that all apartment units proposed meet the minimum requirements of the Apartment Guidelines 2018. A unit by unit summary of provision is identified within this assessment.

## Houses

All 16 house units are provided with private gardens. In summary, we note the following provision for private gardens associated with the house units proposed:

House Type	DLR Requirement	Provision		
1 Bed	48 sq m	48-57 sq m		
3 Bed	60 sq m	95-228 sq m		

Table 3.2 Private Open Space Provision

In terms of gardens depths, we note that the 2 storey units deliver distances of between c. 6.4 and c. 15m. Separation distances with adjoining dwellings at Willow Grove are delivered at 15.2 - 20.4m. Notably, the 10 x 2 storey house units proposed have no windows to the rear at first floor level, alleviating any potential concerns for overlooking.

Gardens associated with the bungalow units are mostly to the front and side of units. Bungalow units are located c. 1.2-2.4m from the adjoining boundary. This arrangement is considered appropriate on the basis of the single storey nature of the units proposed and the nature of the Build to Rent development typology proposed.

# Open space and Landscaping

# The Landscape Plan

The delivery of a quality open space proposal and an exceptional landscape masterplan for the site has been a key objective for this proposal and planning application. Following the pre-planning stage of this project with An Bord Pleanala, the applicant considered the initial concerns set out by the competent authorities and appointed Cameo & Partners Design Studio to a new and innovative landscape masterplan for the site. The current design delivers generous and central open space areas with a permeable landscape layout, which will be accessible to all users. The quality of the open space now proposed coupled with the quantum of open space delivered has ensured the delivery of a superior landscape masterplan.

The competent authority is directed to the input from Cameo & Partners, which has been summarised in brief below:

The design concept surrounding the landscape plan has reviewed the use of clear and distinct zones; an ecology strategy; a social strategy; and passive and active open space uses.

Cameo's concept is based on the principle of relationships between the building, internal and external spaces and the connection to the garden.

The open space concept has been focused on the following elements:

- 1. High quality, elegant entrance zone with ornamental planting.
- 2. Rock garden with water feature and seating.
- 3. Flexible play / activity area on amenity lawn and open space.
- 4. Paving with planted joints connecting the wider site.
- 5. Sculptural seating and social space with mound.
- 6. Rainwater gardens for informal play and enhance bio- diversity.
- 7. Reflecting water feature around the amenity space.
- 8. Sensory garden with scented planting which also provide food source for pollinators and enhance bio-diversity.
- 9. Activity zone with BBQ.
- 10. Activity area for informal play and socializing.
- 11. Sunken play area with sinuous path which connects activity nodes.
- 12. Activity nodes.
- 13. Informal play area.
- 14. Buffer planting with native trees and shrubs
- 15. Cycle and pedestrian connection with natural planting.

## Car Parking

As detailed in the Mobility Management Plan detailed by DBFL, there is a car parking provision of 274 no. car parking spaces, of which 273 no. spaces will be at basement level and 1 no. spaces will be at surface level.

Development management will actively manage the site's parking arrangements through a Parking Management Strategy. The low availability and cost of car parking spaces (0.6 spaces/apartment unit) will discourage the use and ownership of private vehicles and promote the use of sustainable transportation modes such as walking and cycling.

Of the car parking spaces assigned to the proposed development;

- 247 no. basement car parking spaces are allocated for the 452 no. apartments (including 9 no. visitor spaces and 11 no. mobility impaired spaces);
- 26 no. car parking spaces are allocated for the 10 no. 3 bed semi-detached houses and the 6 no. one bed bungalows;
- 11 no. car parking spaces will be reserved as dedicated mobility impaired spaces as specified by the DLRCC requirements for 4% of the overall car parking provision;
  - 1 no. space will be at surface level by the development entrance;

- 10 no. spaces will be at basement level and are allocated for apartment residents;
- 28 no. electric vehicle charging points have been assigned as per DLRCC requirements; and
- 4% will be allocated as spaces for car sharing clubs (11 no. car parking spaces).

A drop off zone is proposed at the entrance to the scheme.

The car sharing clubs offer residents access to a vehicle without ownership.

Managed by GoCar, all residents will have the option to become members of the car share service. On becoming members, residents can then book cars online or via the app for as little as an hour, then unlock the car with their phone. The keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include;

- o The reduction of the number of cars on the road and therefore traffic congestion, noise and air pollution;
- o Minimising the demand for car parking and freeing up land traditionally used for private parking spaces, but which may not be used,
- o Increasing use of public transport, walking and cycling as the need for car ownership is reduced and
- o Car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity.

In support of the proposed car parking proposals, we refer the competent authority to the material prepared and submitted by DBFL Consulting Engineers.

# Cycle Parking

The DHPLG cycle parking requirements for the development are 850 spaces. The DLRCC requirement is a total of 543 no. cycle spaces for this development.

We can confirm that a total of 616 cycle spaces are delivered for the current proposal. 512 spaces are proposed at basement level and 104 are proposed at surface level to server the overall development.

Of this provision, 512 no. long stay cycle spaces will be at basement level and 104 no. spaces will be located at ground level which are intended as short stay cycle parking spaces for visitors to the development.

## **Use of Natural Resources**

## Soil

As detailed in the Constructions Management Plan prepared by DBFL Consulting Engineers; site development works will include stripping of topsoil and excavation of subsoil layers. These activities have potential to expose the soils and geological environment to pollution.

The contractor shall obtain approval of their proposed erosion and sediment control measures from Dun Laoghaire-Rathdown County Council's Environment Section prior to commencing works on site.

## Foul Water and Water Supply

We can also confirm that there is confirmation of feasibility for the proposed development to connect to public water mains and sewers. We refer specifically to the Irish Water Confirmation of Feasibility attached to the input from DBFL Consulting Engineers, which sets out that subject to a valid connection agreement being put in place, the proposed connection to Irish Water can be facilitated.

# <u>Gas</u>

During operational stage, the only potential natural resources utilised will potentially be natural gas and water in quantities applicable to the daily operation of the new dwellings, and tenant amenity space.

Land, soil and biodiversity are not considered to feature as natural resources used at operational stage.

# Energy & Sustainability

As per the Energy & Sustainability Report prepared by OCSC Consulting Engineers, a holistic sustainable approach been adopted by the design team for the proposed Cornelscourt residential development at Old Bray Road, Dublin 18. Through detailed design, a number of sustainability and efficiency features have been considered throughout.

The proposed development will comply with Part L 2019 (NZEB), as well as achieving an A2/A3 BER.

The optimised approach is based on the Energy Hierarchy Plan - Be Mean, Be Lean, Be Green.

## Be Mean

For the new build elements, the façade performance specification has been optimised to limit heat loss, improve air tightness and thermal transmittance and to maximise natural daylight.

## Be Lean

High efficiency central plant will be specified where applicable to take advantage of the optimised façade design measures that have been introduced;

A low energy lighting design will be utilised to further reduce energy consumption and increase occupant thermal comfort.

## Be Green

Renewable energy technologies such as Air Source Heat Pumps, Exhaust Air Heat Pumps, Solar PV, and Variable Refrigeration Flow systems will be considered for implementation;

A number of sustainable design features have been considered within the design to achieve the sustainability targets of the proposed refurbishment. These include:

- The proximity of the development to public transportation networks;
- Natural daylight;
- Water efficiency measures such as low consumption sanitary fittings; and
- Improved indoor environmental quality.

This report confirms that if the energy and sustainability strategy is successfully implemented, the proposed Cornelscourt residential development will satisfy all Part L and BER requirements.

# **Services**

The following service proposals are detailed fully within the Infrastructure Design Report prepared by DBFL Engineering Consulting.

# Water

Existing public water supply infrastructure is located along Old Bray Road (24" Cast Iron Watermain and 4" uPVC Watermain). This infrastructure is expected to provide a suitable connection for the proposed development.

The site's proposed water main layout is shown on DBFL Drawing 180208-XX-XX- DR-C-3002.

It is proposed to take a 200mm diameter connection off the existing 24" Cast Iron public water supply line (located along the Old Bray Road). A looped water main will be provided within the proposed development.

The proposed water main layout and connections to existing public water mains have been designed in accordance with Irish Water Standard Detail STD-W-02.

Individual houses located along the site's eastern boundary will have their own connections (25mm O.D. PE pipe) to distribution water mains via service connections and meter / boundary boxes. Individual connections are to be installed in accordance with Irish Water Standard Detail

## Surface Water Drainage and SUDS

The following methodologies are being implemented as part of a SuDS treatment train approach:

- Surface water runoff from the roofs of houses along the eastern boundary will be routed to the proposed surface water pipe network via bio-swale filter drains (infiltration trenches) located in their rear gardens (providing an additional element of attenuation and treatment).
- Surface water runoff from apartment roofs will be captured by green roofs (sedum blanket) prior to being routed to the piped surface water drainage network.
- A drainage reservoir (drainage board) is to be provided on the podium slab over basement.
- Attenuation of the 30 and 100 year return period storms within Stormtech Attenuation Chambers.
- Installation of a vortex flow control device (Hydrobrake or equivalent), limiting surface water discharge from the site to 10.0 l/sec/ha
- Surface water discharge will also pass via a Class 1 full retention fuel / oil separator (sized in accordance with permitted discharge from the site)

## Foul Water Drainage

Existing foul drainage infrastructure (225 diameter) is located adjacent to the site's eastern corner (at the northern end of Willow Grove). Similar to comments above regarding surface water drainage, this pipeline outfalls to the east via a crossing under the N11 and Southpark .

As the site generally falls from its western corner towards its eastern corner, a gravity foul drainage solution can be provided for the proposed development.

For further information, please refer to Figure 4.1 and the Irish Water Network Plan included in Appendix A in the Infrastructure Design Report prepared by DBFL.

# 1.3 Description of Construction Stage

# **Duration and Timing**

The construction period is estimated at c. 36 months.

## **Production Of Waste**

The principal objective of sustainable resource and waste management is to use material resources more efficiently and to reduce the amount of waste requiring final disposal. However, where residual waste is generated, it should be dealt with in a way that follows the national waste hierarchy and actively contributes to the economic, social and environmental goals of sustainable development.

During the construction stage, quantities of construction and demolition related waste will arise. This quantum of waste is expected to be minimal. Any waste arising will be re-used, recycled or sent to a licensed waste facility.

The proposed development has been designed to comply with local, regional, and national waste legislation along with best practice. All waste generated from the operational phase of this development will be sent for reuse, recycling and/or disposal at appropriately licensed waste facilities.

We confirm for An Bord Pleanala that this application is accompanied by the following documents relating to waste management:

- Construction Management Plan prepared by DBFL Consulting Engineers
- Operational Waste Management Plan prepared by Byrne Environmental Consulting.

These documents clearly set out how waste will be managed and relevant mitigation measures during the construction and operational stages of the project.

# Construction Waste

The development of the subject site will require the stripping of top and sub soils and the excavation of ground to basement level. The range of works required for the Construction Phase are summarised in Table 3.1. The expected construction and demolition waste that will be generated throughout the course of the development are described in Tables 3.2 & 3.3 below.

Activity Sequence	General Description
Identification of Existing Utility Services	Set up bunting, mark location of live services, including E.S.B., Gas etc.
Removal of Vegetation	e.g. Trees and vegetation
Site preparation	Soil stripping, stockpiling and export
Transport of material off site	Segregation of materials on site
Substructure	Rebar, Formwork and Pour, Foundations
Superstructure	Rebar, Formwork and Pour, Blockwork
Roof	Rebar, Formwork and Pour and Waterproof
External Envelope	Place façade to superstructure
Internal Finishes	Mechanical & Electrical etc.
External Landscaping	Hard and soft landscaping

Table 3.1 Sequence of Construction & Demolition Works

Description of Waste	%
Mixed Construction & Demolition Waste	33
Wood	28
Plasterboard (Gypsum materials)	10
Ferrous Metals	8
Concrete	6
Mixed other wastes	15
Total	100

## Table 3.2 Typical Construction Waste Types

Waste Type	Predicted tonnage to be produced	Re-Use		Recyclable		Disposal	
		Tonnage	%	Tonnage	%	Tonnage	%
Mixed C&D	1250	125	10	1000	80	125	10
Timber	1000	400	40	550	55	50	5
Plasterboard	500	150	30	300	60	50	10
Metals	250	12.5	5	225	90	12.5	5
Concrete	200	60	30	130	65	10	5
Mixed waste	800	160	20	480	60	160	20
Total	4000	907.5		2685		407.5	

## Table 3.3 Predicted Waste Generation

It is estimated that c. 80,000m<sup>3</sup> of topsoil of subsoils will be excavated to facilitate the development.

Landscaping of the development will re-use a quantity of the stockpiled topsoil.

## **Proposed works and Construction Methods**

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:

- <u>Excavation</u> This includes site clearing and earthworks – soil / rock removal – required to prepare the site for the foundations, the basement and residential and commercial floorspace above.
- <u>Structure</u> Structure includes the foundations and the physical frame of the residential units and commercial units.
- <u>Enclosures</u>

The enclosures for the building will be formed from brick, block work, timber, and glass, with concrete roofs, all with the required levels of insulation and water proof membranes.

<u>Facades</u>

The facades will comprise of selected Brick finish with brick return detailing, brick/rendered inset panels, selected Metal cladding to selected elevation elements and bay windows, selected Feature stone cladding to residents' main entrance, selected Aluclad/aluminium windows/doors

<u>Services</u>

The requisite services will be provided including drainage and lightning.

Landscaping

The landscaping works include some hard landscaping, roads, footpaths, cycle-paths, bed and tree planting, and significant open spaces.

## **Construction Methods – Phasing of Development**

The construction methodology that will be utilised on the site will have three main attributes to minimise the impact of the construction phase.

- Phasing of construction
- Efficiency
- Minimisation of waste generated

Construction methods will use techniques that afford safe, efficient, and cost-effective methods of working. In order to minimise the traffic impact associated with the removal of material from the site and the construction phase in general, the Contractor will prepare and implement a Construction Traffic Management Plan.

# Construction Traffic, Parking and Site Working Hours

The Construction Management Plan and TTA, prepared by DBFL address these issues in greater detail. It advises that the works associated with the new development will develop additional traffic on the public road network associated with the removal of excavated material etc. and the delivery of new materials, concrete trucks etc.

The vehicles associated with the construction activities are as follows:

- Excavators;
- Dump trucks;
- Concrete delivery trucks;
- Concrete pumps;
- Mobile cranes; and
- Mobile hoists.

It is proposed that the following construction working hours will apply:

- For the duration of the proposed infrastructure works, the maximum working hours shall be 07:00 to 19:00 Monday to Friday (excluding bank holidays) and 09:00 to 13:00 Saturdays, subject to the restrictions imposed by the local authority.
- No working will be allowed on Sundays and Public Holidays.
- Subject to the agreement of the local authority, out of hours working may be required for water main connections, foul drainage connections etc.

It will be necessary for the appointed contractor to prepare a detailed construction traffic management plan to ensure the smooth operation of the local road network during the course of the construction project. It will be necessary to agree this construction traffic plan with Dun Laoghaire-Rathdown County Council in advance of the project and that the construction traffic plan management is reviewed throughout the project.

## 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.

## Noise & Vibration due to Construction Work

The potential impacts associated with noise and vibration due to construction work, are addressed in Chapter 11 Noise & Vibration.

## Air Quality

The potential impacts associated with air quality due to construction work are addressed in Chapter 10 Air Quality and Climate.

## **Construction Waste Management**

A standalone Construction and Demolition Waste Management Plan & an Operational Waste Management Plan for the proposed development have been prepared by Byrne Environmental and are included with this application. The purpose of this report is to ensure the best practice is followed in terms of waste and environmental management during the construction phase of the proposed development, and to ensure adverse impacts on the receiving environment – including local residents - are minimised.

## **Construction Management Plan**

A Construction Management Plan (CMP) has been prepared by DBFL. The plan sets out typical arrangements and measures which may be undertaken during the construction phase of the project in order to mitigate and minimise disruption / disturbance to the area around the site. The purpose of this report is to summarise the possible impacts and measures to be implemented and to guide the Contractor who will be required to develop and implement the Construction Management Plan on site.

# 1.4 Mitigation Measures

The Construction Management Plan prepared by DBFL as part of this application has summarised the possible impacts and measures to be implemented and to guide the Contractor who will be required to develop and implement the Construction Management Plan on site. The appointed contractor will be required to prepare a Construction Management Plan in advance of works commencing on site. This will incorporate all mitigation measures proposed within this EIAR for the protection of the environment and human health. Relevant conditions of planning will also be included within the plan.

Monitoring will be undertaken during the demolition and construction phase in line with the recommendations contained chapter 20 of the EIAR.