

## **16.0 INTERACTIONS**

### **16.1 Introduction**

This chapter of the EIAR was prepared by Patricia Thornton (BSc. Surv) (MRUP), Director of Thornton O'Connor Town Planning. Patricia is a Corporate member of the Irish Planning Institute and has 16 No. years post-qualification experience.

This chapter collates the significant interactions between the different disciplines outlined through this EIAR. Table 16.1 (included at the end of this chapter) provides a matrix which summarises the significant interactions associated with the proposed development.

This chapter outlines and discusses the principal significant interactions however many other slight or less significant interactions may occur which have been outlined throughout this EIAR.

Throughout the preparation of this EIAR, each of the specialist consultant liaised with each other on a continual basis and dealt with potential interactions between effects predicted as a result of the proposed development and ensured that all required mitigation measures were incorporated where necessary.

### **16.2 Description of Significant Interactions**

#### **16.2.1 Interactions between Population and Air Quality/Climate**

Interactions between population and air quality/climate are discussed in Chapter 4 and 11. The main interactions are predicated to arise during construction stage as there will be dust emissions associated with the construction of the proposed development. Mitigation measures such as a dust minimisation plan (outlined in Appendix 11.3) will minimise dust emissions during construction stage and ensure that no significant adverse impacts will occur on population and human health. The mitigation measures that will be put in place at the proposed development will ensure that the impact of the proposed development complies with all ambient air quality legislative limits and therefore the predicted impact is long term and neutral with respect to human beings.

#### **16.2.2 Interactions between Population and Noise/Vibration**

Interactions between population and noise/vibration are discussed in Chapter 4 and 12. Best practice noise and vibration control measures will be employed by the contractor during the construction phase in order to avoid significant impacts at the nearest sensitive buildings. During the operational stage, the predicted noise level associated with additional traffic is predicted to be of insignificant impact along the existing road network. In the context of the existing noise environment, the overall contribution of traffic is not considered to pose any significant impact to nearby residential locations. It can be concluded that, once operational, the predicted change in noise levels associated with additional traffic is predicted to be of imperceptible impact along the existing road network.

### 16.2.3 Interactions between Population and Traffic

The scheme will be developed in line with the Traffic and Transport chapter (Chapter 14 of this EIAR) and the separately enclosed Preliminary Construction Management Plan (PCMP) to ensure any impacts on local traffic is minimised during the construction stage. The PCMP notes that a large quantum of the on-site employees will arrive in shared transport therefore reducing the potential for associated temporary negative impacts on the surrounding road network.

As the development proposes some 590 No. residential units and associated (albeit) reduced car-parking, there will be additional traffic movements at the site and in the vicinity, which will have a minor negative impact on the existing population. However, the promotion of sustainable modes of transport from the site during the operational stage will significantly mitigate against any potential impacts that may arise on traffic in the area.

If the development does not proceed at the subject lands, there would be a potential negative impact for pedestrians in the local area as the significantly enhanced pedestrian permeability through the site would not be provided.

### 16.2.4 Interactions between Population and Landscape and Visual Impact

Chapter 8 provides a Landscape and Visual Impact Assessment prepared by Mitchell and Associates Landscape Architects. The chapter notes that people living in the existing housing estate to the north and east of the site will be impacted negatively to a slight extent by the construction of the proposed development. The construction impacts will be of short-term duration. Mitigation measures such as the provision of site hoarding will be erected to restrict views of the construction activity e.g. standard 2.4m high construction hoarding. The impacts during the construction stage will be of short-term duration and are associated with any new development proposals.

During the operational stage the LVIA notes that the insertion of any proposed development into this existing open expanse will alter the landscape context of the area to an extent, however for this particular site, existing clear views in are actually quite limited and this will limit associated impacts.

The visual effects of the proposed development are markedly reduced primarily because of the limitation placed on building heights in the designed scheme coupled with the screening effect of other built developments in the vicinity and the existing tree lined hedgerows edging the subject site.

The nature and scale of the proposed development are entirely appropriate to the surrounding landscape context. The scheme is well-designed to integrate with its surroundings and to connect with and improve the existing urban fabric. The open space and outdoor facilities provided are of a high quality and of a type and scale appropriate to the nature of the residential scheme. The proposed planting scheme is of a high quality and will be fundamental to the successful integration and future maturity of the scheme. The provision of high-quality landscape public open space will ensure a positive living environment is provided for the population within the proposed development.

### **16.2.5 Interactions between Population and Archaeology**

The archaeology works which have taken place at the subject site in advance of the subject planning application have been detailed in Chapter 5 of this EIAR.

The excavation of these archaeological features will ensure that they are made available to the general public, allowing a greater understanding of our archaeological heritage. An interpretation panel with information in relation to the archaeological work carried out on site is proposed to be placed in the north-east pocket park and the trees and the bank will follow the line of the ring-fort.

### **16.2.6 Interactions between Population, Biodiversity and Water-Hydrology**

As set out in Chapter 7, the inclusion of SUDs measures within the surface water attenuation systems will ensure that no negative effects occur to water quality and therefore there will be no negative impacts on population and human health in relation to water quality.

### **16.2.7 Interactions between Biodiversity and Landscape**

The landscaping strategy includes new planting which will provide habitat for birds, invertebrates and other common wildlife which is a benefit for the local environment.

### **16.2.8 Interactions between Biodiversity and Land, Soils and Geology**

Removal of the existing topsoil layer will be required across the site as well as removal of some trees, vegetation etc. Some existing trees and planting will be removed as part of the proposed development however this has been supplemented to ensure a positive living environment is proposed on the lands once the development is complete.

### **16.2.9 Interactions between Land, Soils and Geology, Traffic and Noise/Vibration**

Delivery of materials to the subject lands will provide increased traffic on the surrounding road network. There will be a level of construction related noise and vibration during the construction of the development on the lands. However, mitigation works outlined in Chapter 9 such as the provision of vehicle wheel wash facilities will be installed in the vicinity of site entrances and road sweeping will be implemented as necessary in order to maintain the road network in the vicinity of the site.

Mitigation measures proposed such as the above will ensure that the potential impacts of the proposed development on soils and the geological environment do not occur during the construction phase. There are no predicted impacts arising from the operational phase on lands/soils and geology as a result of traffic.

### **16.2.10 Interactions between Land, Soils and Geology and Water-Hydrology**

Stripping of topsoil will result in exposure of the underlying subsoil layers to the effects of weather and construction traffic and may result in subsoil erosion and generation of sediment laden surface water runoff. Chapter 9 sets out that the stripping of topsoil will be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development. Surface water runoff from areas stripped of topsoil will be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate. Mitigation measures proposed such as the above will ensure that the potential impacts of the proposed development on soils and the geological environment do not occur during the construction phase.

### **16.2.11 Interactions between Land, Soils and Geology and Waste**

Oil, fuel etc. storage areas are to be decommissioned on completion of the construction phase. Any remaining liquids are to be removed from site and disposed of at an appropriate licenced facility. The management of waste during the construction phase in accordance with the Construction and Demolition Waste Management Plan will meet the requirements of regional and national waste legislation and promote the management of waste in line with the priorities of the waste hierarchy.

### **16.2.12 Interactions between Land, Soils and Geology and Air Quality**

As set out in Chapter 9, dust generation can occur during extended dry weather periods as a result of construction traffic. Dust suppression measures (e.g. dampening down) will be implemented as necessary during dry periods). Chapter 11 notes that with the appropriate mitigation measures to prevent fugitive dust emissions, it is predicted that there will be no significant interactions between air quality and land, soils and geology.

### **16.2.13 Interactions between Air Quality and Traffic**

Chapters 11 and 14 outline interactions between air quality and traffic. Interactions between air quality and traffic can be significant with increased traffic movements and reduced engine efficiency, i.e. due to congestion, the emissions of vehicles increase. The impacts of the proposed development on air quality are assessed by reviewing the change in annual average daily traffic on roads close to the site. Chapter 11 concludes that the impact of the interactions between traffic and air quality are considered to be not significant in the case of the subject development.

## **16.3 Cumulative Impacts**

At the time of writing this Environmental Impact Assessment Report, it appears that there are no significant projects in the vicinity of the site seeking planning permission. We note that under SDCC Reg. Ref. SD18A/0227 [ABP Ref. ABP-304162-19], permission has recently been granted by An Bord Pleanála for 6 No. dwellings at a site to the northwest of the

subject site (known as Mount Michael & Wits End, The Rookery, Scholarstown, Dublin 16). However, having regard to the separation distances provided and the existing buildings located between the subject site and the development at the Rookery when constructed, it is considered that no cumulative impacts will occur as a result of the proposed development.

There has been one other development project in the vicinity of the subject site in recent years, 'Scholarstown Wood' which was granted under SDCC Reg. Ref. SD15A/0017 [ABP Ref. PLo6S.244732] (as amended). This development is located c. 550 No. metres from the subject site and has been reviewed and included within the traffic analysis for the Traffic and Transport Assessment. This application was granted in 2015 and has been incorporated into the TTA assessment as a 'committed development' with traffic generated from this proposed development applied to the base road network within the traffic excel model.

Any future development in the vicinity of the subject site would have to similarly undergo Traffic and Transport assessments to assess the potential cumulative impacts to the transport network.

Therefore, it is not proposed to include any specific measures for monitoring or mitigation to be undertaken in relation to cumulative impacts.

Interactions ➔	Population and Human Health	Archaeology	Architectural Heritage	Biodiversity	Landscape and Visual Impact	Land, Soils and Geology	Water-Hydrology	Air Quality and Climate	Noise and Vibration	Waste Management	Traffic and Transport	Site Services
Population and Human Health		✓		✓	✓		✓	✓	✓		✓	
Archaeology												
Architectural Heritage												
Biodiversity					✓	✓	✓					
Landscape and Visual Impact												
Land, Soils and Geology							✓	✓	✓	✓	✓	
Water-Hydrology												
Air Quality and Climate											✓	
Noise and Vibration											✓	
Waste Management												
Traffic and Transport												
Site Services												

Table 16:1 Matrix of Significant Interactions Discussed Throughout Chapter 16