



**ARMSTRONG  
FENTON**  
ASSOCIATES

PROJECT:

**Ashbourne Strategic Housing Development**

**Environmental Impact Assessment Report - Volume I  
Non - Technical Summary**

CLIENT:

**Arnub Ltd. & Aspect Homes (ADC) Ltd.**

DATE:

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**Planning &  
Development  
Consultants**



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## 1.0. Introduction

### 1.1. Introduction

This Non-Technical Summary (hereafter 'NTS') has been prepared by Armstrong Fenton Associates, Planning & Development Consultants, on behalf of Arnub Ltd. & Aspect Homes (ADC) Ltd. (the Applicants) who intend to apply to An Bord Pleanála for a Strategic Housing Development (SHD) on a site located in the townlands of Baltrasna and Milltown, in Ashbourne, County Meath.

The central purpose of the Environmental Impact Assessment Report (EIAR) is to undertake an appraisal of the likely and significant impacts on the environment of the proposed development in parallel with the project design process, and to document this process in the EIAR. This is then submitted to the competent / consent authority to enable it to assess the likely significant effects of the proposed development on the environment. This assessment will then inform the decision as to whether the proposed development should be permitted to proceed.

The subject site is located to the west of the Dublin Road (R135) into Ashbourne, west of The Briars residential estate, south-west of Cherry Lane and north-west of Hickey's Lane. To the south are agricultural lands in the Rural Area (i.e., outside of Ashbourne's development boundaries), while to the west are greenfield lands that are zoned 'Open Space'. To the north are the existing residential dwellings at Alderbrook Rise, Alderbrook Downs & Alderbrook Heath, while the existing residential dwellings at Tara Close and Tara Court abut the site to the north-west. It should be noted that the site encompasses third-party lands in the northern part of the site, which are identified the site layout plan(s) submitted with the planning application.

The proposed development is a residentially led development comprising the construction of 702 no. dwellings, comprised of 2 & 3 storey 420 houses, 38 no duplex units in 19 no. 3 storey blocks and 244 no. apartments, in 20 no. 3-6 storey blocks, together with 2 no. creches, 4 no. retail units & 1 no. GP practice / medical use unit, and all associated site development works on a site measuring c. 20.04 hectares.

A full description of the proposed development site, together with a description of the proposed development, is provided in Chapter 2 of the accompanying Volume II of this EIAR.

The existing Meath County Development Plan 2012-2027 provides a development strategy for the proper planning and sustainable development of the subject site.

### 1.2. Proposed Development

1.2.1. The proposed development is described in full below, as per the statutory notices submitted for the subject planning application:

**Arnub Ltd. & Aspect Homes (ADC) Ltd. intend to apply to An Bord Pleanála for permission for a strategic housing development, on an overall site of c. 20.04 hectares, located in the townlands of Baltrasna and Milltown, Ashbourne, County Meath. The application site is located to the west / south-west of Dublin Road (R135), south-west of Cherry Lane, west of the existing dwellings at The Briars and Cherry Court, south of the existing dwellings at Alderbrook Heath, Alderbrook Downs & Alderbrook Rise, east / south-east of the existing dwellings at Tara Close & Tara Place, and north-west and south-west of Hickey's Lane.**

The development will consist of the following:

**(1) Demolition of all existing structures on site, comprising 3 no. single storey dwellings and their associated outbuildings (total demolition area: c.659m<sup>2</sup>).**



- (2) Construction of 702 no. residential dwellings comprised of: 420 no. 2 & 3 storey 2, 3, 4, & 5 bed detached, semi-detached & terraced houses, 38 no. 2 & 3 bed duplex units in 19 no. 3 storey buildings, and 244 no. 1, 2, & 3 bed apartments in 20 no. buildings ranging in height from 3 to 6 storeys.**
- (3) The development also includes for the following non-residential uses: (i) 2 no. childcare facilities located in Blocks A and A1 (c. 289m<sup>2</sup> & c.384m<sup>2</sup> respectively), (ii) 4 no. retail units comprised of: 2 no. units in Block A (c.106m<sup>2</sup> & c.174m<sup>2</sup> respectively), 1 no. unit in Block A1 (c.191m<sup>2</sup>), & 1 no. unit in Block B1 (c.469m<sup>2</sup>), and (iii) 1 no. GP practice / medical use unit located in Block A1 (c.186m<sup>2</sup>).**
- (4) The development provides for a basement level car park located under Block A1 (c. 4,095m<sup>2</sup>) and, 2 no. undercroft car parks located at the ground floor level of Block A (c. 466m<sup>2</sup>) and Block B1 (c. 1,466m<sup>2</sup>).**
- (5) The development provides for an area of c.1 hectare reserved for a future school site and playing pitch at the western boundary of the site.**
- (6) Vehicular access to the development will be via 2 no. access points as follows: (i) from Cherry Lane, located off Dublin Road (R135), in the north-east of the site and, (ii) from Hickey's Lane, located off Dublin Road (R135), to the east of the site. The development includes for road upgrades / improvement works to both Cherry Lane and Hickey's Lane and their junctions with Dublin Road (R135). A new east-west access road through the development site extending from Cherry Lane to the western boundary of the site and all associated site development works is proposed. The development includes for 1 no. pedestrian / bicycle green link access point from Dublin Road (R135) and pedestrian and cycle paths throughout the development site.**
- (7) The development also provides for (i) all ancillary / associated site development works above and below ground, (ii) public open spaces (c.28,885m<sup>2</sup> total), including hard & soft landscaping, play equipment & boundary treatments, (iii) communal open spaces (c.3,180m<sup>2</sup> total) (iv) undercroft, basement, and surface car parking, including for EV, mobility impaired, and car share parking spaces (total 1,262 no. car parking spaces) (v) 869 no. dedicated bicycle parking spaces at undercroft and surface level, including for external bicycle stores & visitor spaces (vi) bin storage, (vii) public lighting, (viii) signage (ix) plant (M&E) & utility services, including for 7 no. ESB sub-stations (x) green roofs, all on an overall application site area of 20.04 hectares.**

### **1.3. Requirement for EIA (Screening)**

Screening is the term used to describe the process for determining whether a proposed development requires an EIA by reference to mandatory legislative threshold requirements or by reference to the type and scale of the proposed development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I of the EIA Directive 85/337/EC requires as mandatory the preparation of an EIA for all development projects listed therein. Schedule 5 (Part 1) of the Planning & Development Regulations 2001 (as amended) transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The Directive prescribes mandatory thresholds in respect to Annex 1 projects.

Annex II of the EIA Directive provides EU Member States discretion in determining the need for an EIA on a case-by-case basis for certain classes of project having regard to the overriding consideration that projects likely to have significant effects on the environment should be subject to EIA.

Schedule 5 (Part 2) of the Planning & Development Regulations 2001-2022 set mandatory thresholds for each



project class. Sub-section 10(b) (iii) and (iv) addresses 'Infrastructure Projects' and requires that the following class of project be subject to EIA:

- (b) (i) Construction of more than 500 dwelling units.

Category 10(b)(iv) refers to 'Urban development which would involve an area greater than 2 hectares in the case of business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.'

This proposed development comprises of; *inter alia*, the provision of 702 no. residential units, 2 no. creches, 4 no. retail units, 1 no. GP practice / medical use unit, open space, and all associated infrastructure on an overall site area of 20.04 hectares.

An EIA is therefore mandatory as the proposed development at Baltrasna & Milltown in Ashbourne, County Meath, includes provision of 702 no. dwellings, exceeding the threshold of 500 dwelling units.

#### 1.4. Purpose of this EIAR

The objective of the EIAR will also be to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process.

The EIAR is the primary element of the Environmental Impact Assessment (EIA) process and is recognised as a key mechanism in promoting sustainable development, identifying environmental issues, and in ensuring that such issues are properly addressed within the capacity of the planning system.

The intention of this EIAR document is to provide transparent, objective and replicable documentary evidence of the EIA evaluation and decision-making processes which led to the selection of the final project configuration. The EIAR documents the consideration of environmental effects that influenced the evaluation of alternatives. It also documents how the selected project design incorporates mitigation measures; including impact avoidance, reduction or amelioration; to explain how significant adverse effects will be avoided.

#### 1.5. Information to be contained in a Non-Technical Summary

This NTS has been prepared in accordance with *inter alia* the requirements of the EU 2014 EIA Directive, Planning and Development Act 2000-2022 (as amended) and the Planning and Development Regulations 2001-2022 (as amended) (in particular by the European Union (Planning & Development) (Environmental Impact Assessment)).

##### **EIA Process Overview**

The main purpose of the EIA process is to identify the likely significant impacts on the human environment, the natural environment and on cultural heritage associated with the proposed development, and to determine how to eliminate or minimise these impacts. The EIAR summarises the environmental information collected during the impact assessment of the proposed development.

A new definition of environmental impact assessment is now contained in Section 170A of the Planning and Development Act, 2000, as amended which reflects to the process as described under Article 1(2)(g) 4 of Directive 2014/52/EU and goes on to say that it includes:

- (i) *an examination, analysis and evaluation, carried out by the planning authority or the Board, as the case may be, in accordance with this Part and regulations made thereunder, that identifies, describes and assesses, in an appropriate manner, in the light of each individual case, the direct and indirect*



*significant effects of the proposed development on the following:*

- (I) population and human health;*
  - (II) biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive;*
  - (III) land, soil, water, air and climate;*
  - (IV) material assets, cultural heritage and the landscape;*
  - (V) the interaction between the factors mentioned in clauses (I) to (IV), and*
- (ii) as regards the factors mentioned in subparagraph (i)(I) to (V), such examination, analysis and evaluation of the expected direct and indirect significant effects on the environment derived from the vulnerability of the proposed development to risks of major accidents or disasters, or both major accidents and disasters, that are relevant to that development;*

Several interacting steps typify are involve in the various stages of the EIA process, which may be referred to in outline as including:

- Screening
- Scoping
- Preparation of EIA Report
- The examination by the Competent Authority (CA) of the information presented in the environmental impact assessment report

**Screening:** Screening is the term used to describe the process for determining whether a proposed development requires an EIA.

**Scoping:** This stage firstly identifies the extent of the proposed development and associated site, which will be assessed as part of the EIA process, and secondly, it identifies the environmental issues likely to be important during the course of completing the EIA process through consultation with statutory and non-statutory stakeholders.

**Preparation of EIAR Report:** The main elements in the preparation of an EIA Report relate to the consideration of alternatives, project description, description of the receiving environment, identification and assessment of impacts, monitoring and mitigation proposals.

**The examination by the CA of the information presented in the environmental impact assessment report:** An Bord Pleanála must consider each application for development consent on its own merits, taking into account all material considerations, including the reasoned conclusion in respect of EIA, before making its decision to grant, with or without conditions, or to refuse consent.

## 1.6. Format and Structure of The EIAR

### 1.6.1. EIAR Structure

The structure of the EIAR is laid out in the preface of each part for clarity. It consists of three volumes as follows:

- Volume I: Non-Technical Summary (this document)



- Volume II: Environmental Impact Assessment Report.
- Volume III: Appendices

Volume II is the main volume of the EIAR. It provides information on the location and scale of the proposed development, details on design and impacts on the environment (both positive and negative) as a result of the proposed development. Each of the environmental aspects as listed below are examined in terms of the existing or baseline environment, identification of potential construction and operational stage impacts and where necessary proposed mitigation measures are identified.

The preparation of an EIAR requires the assimilation, co-ordination and presentation of a wide range of relevant information in order to allow for the overall assessment of a proposed development. For clarity and to allow for ease of presentation and consistency when considering the various elements of the proposed development, a systematic structure is used for the main body of the EIAR document. The structure used in the EIAR is a “*Grouped Format structure*”. This structure examines each environmental topic in a separate chapter of the EIAR document. The structure of the EIAR Volume II document is set out in Table 1.1 below

Chapter	Title
1	Introduction
2	Description of the Project and Alternatives
3	Population and Human Health
4	Biodiversity
5	Land, Soils & Geology
6	Water & Hydrology
7	Air Quality & Climate
8	Noise & Vibration
9	Material Assets: Built Services
10	Material Assets: Transportation
11	Material Assets: Resource and Waste Management
12	Cultural Heritage (Archaeological & Architectural)
13	The Landscape
14	Identification of Significant Impacts / Interactions
15	Summary of EIA Mitigation and Monitoring Measures

Table 1. Structure of EIAR – Volume II.

### 1.7. Availability of EIAR Document

A copy of the EIAR document (Volume II), the Non-Technical Summary of the EIAR document (Volume I) and Volume III of the EIAR (Appendices) is available for purchase at the offices of Meath County Council (Planning Authority) and An Bord Pleanála at a fee not exceeding the reasonable cost of reproducing the document.

### 1.8. Statement of Difficulties Encountered

No particular difficulties, such as technical deficiencies or lack of knowledge, were encountered in compiling any of the specified information contained in this statement, such that the prediction of impacts has not been possible. Where any specific difficulties were encountered these are outlined in the relevant chapter of the EIAR.

### 1.9. Errors

While every effort has been made to ensure that the content of this EIAR document is error free and consistent



there may be instances in this document where typographical errors and/or minor inconsistencies do occur. These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIAR.

#### **1.10. EIAR Study Team**

The EIAR was prepared by a study team led by Armstrong Fenton Associates, Planning and Development Consultants, who were responsible for the overall management and co-ordination of the document. The EIAR team is set out in Chapter 1, Table 1.3., of Volume II of the EIAR.





## 2.0. Description of the Project and Alternatives

### 2.1. Information on the Subject Site / Project

#### 2.1.1. Site Location

The subject site is a greenfield site located at the settlement boundary of Ashbourne, to the south-east of Ashbourne town centre (c. 1.5km distance), in the townlands of Baltrasna and Milltown. The subject site, i.e., the red line boundary of the submitted site layout plan(s) / site location map, measures c. 20.04 Ha.

The site is located to the west of the Dublin Road (R135), west of The Briars residential estate, south-west of Cherry Lane and north-west / south-west of Hickey's Lane. To the south-west are agricultural lands in the Rural Area (i.e., outside of Ashbourne's development boundaries), while to the south-east is existing residential development generally in the form of detached rural houses. To the west are greenfield lands zoned for 'Open Space'. To the north are the existing residential dwellings at Alderbrook Rise, Alderbrook Downs & Alderbrook Heath, while the existing residential dwellings at Tara Close and Tara Court abut the site to the north-west.

It should be noted that the site encompasses third-party lands, in the northern part of the site, which are identified as being outside the application site on the submitted site layout plan(s) and do not form part of the subject planning application.

The site is accessed via Cherry Lane to the north-east of the site and Hickey's Lane to the south-east of the site, both of which are directly connected to the Dublin Road (R135).

#### 2.1.2. Site Description

The site has mature hedging around the entirety of its perimeter, save for where it meets the rear gardens of some existing properties to the east. The site comprises 12 no. large agricultural fields which are also defined / separated by existing hedgerows.

The site generally slopes from east to west except for an area at towards western boundary, near the proposed reserved school site included in the subject application, which slopes from west to east.

There are several existing buildings on the site, i.e., 3 no. detached dwellings (c. 354 sq.m in total) along with their associated outbuildings (c. 305 sq.m) which are proposed to be demolished as part of the subject application for permission.

The site is currently used for agricultural purposes.

#### 2.1.3. Project Context

As noted in the planning documentation submitted with the application, the subject site is comprised of lands owned by two different landowners being: Arnub Ltd. and Aspect Homes (ADC) Ltd. Notwithstanding the ownership of the land, the two landowners have joined together to put forward a coherent, unified, application to develop the residentially zoned lands available.

The vast majority of the subject application site is zoned for residential development (i.e., Objective 'A2' – 'New Residential') in the existing Meath County Development 2021-2027(CDP), with the vision for 'A2' zoned lands stated in the CDP as being the objective to:

*"To provide for new residential communities with ancillary community facilities, neighbourhood facilities as considered appropriate."*



The existing CDP goes on to state that 'A2' zoned lands are:

*“the primary zone to accommodate new residential development. Whilst residential zoned lands are primarily intended for residential accommodation, these lands may also include other uses that would support the establishment of residential communities. This could include community, recreational and local shopping facilities. These facilities must be at an appropriate scale and cannot interfere with the primary residential use of the land.”*

A portion of the site (c. 1 Ha), at the western boundary, is zoned for community infrastructure (i.e., Objective 'G1'-Community Infrastructure') in the existing CDP, with the vision for 'G1' zoned lands stated in the CDP as being the objective to:

*“To provide for necessary community, social, and educational facilities.”*

Furthermore, the subject site forms the vast majority of an identified master plan area for Ashbourne i.e., Master Plan 18 of the Ashbourne Written Statement contained in the existing CDP or 'MP 18' on the Ashbourne Land Use Zoning Map of the existing CDP.

The Written Statement for Ashbourne contained in the existing CDP states that, on the MP 18 lands:

*“It is intended that these lands shall provide a primary school site, lands for recreational uses, including playing fields, and lands for residential development. The development of the lands shall be on a phased basis to be agreed as part of the preparation of the Master Plan.”*

The master plan has been agreed with Meath County Council prior to the submission of the subject application and a phasing plan is proposed / submitted as part of the subject application.

The proposed development provides for residential development and recreational uses and caters for an area reserved for a future primary school site, including a playing field in compliance with the requirements of the master plan. The proposed layout has also been designed to comply with the individual zoning objectives attached to the site i.e., zoning objectives 'A2' & 'G1'. For further details please refer to the Planning Statement prepared by Armstrong Fenton Associates which is submitted with the planning application as a separate document.

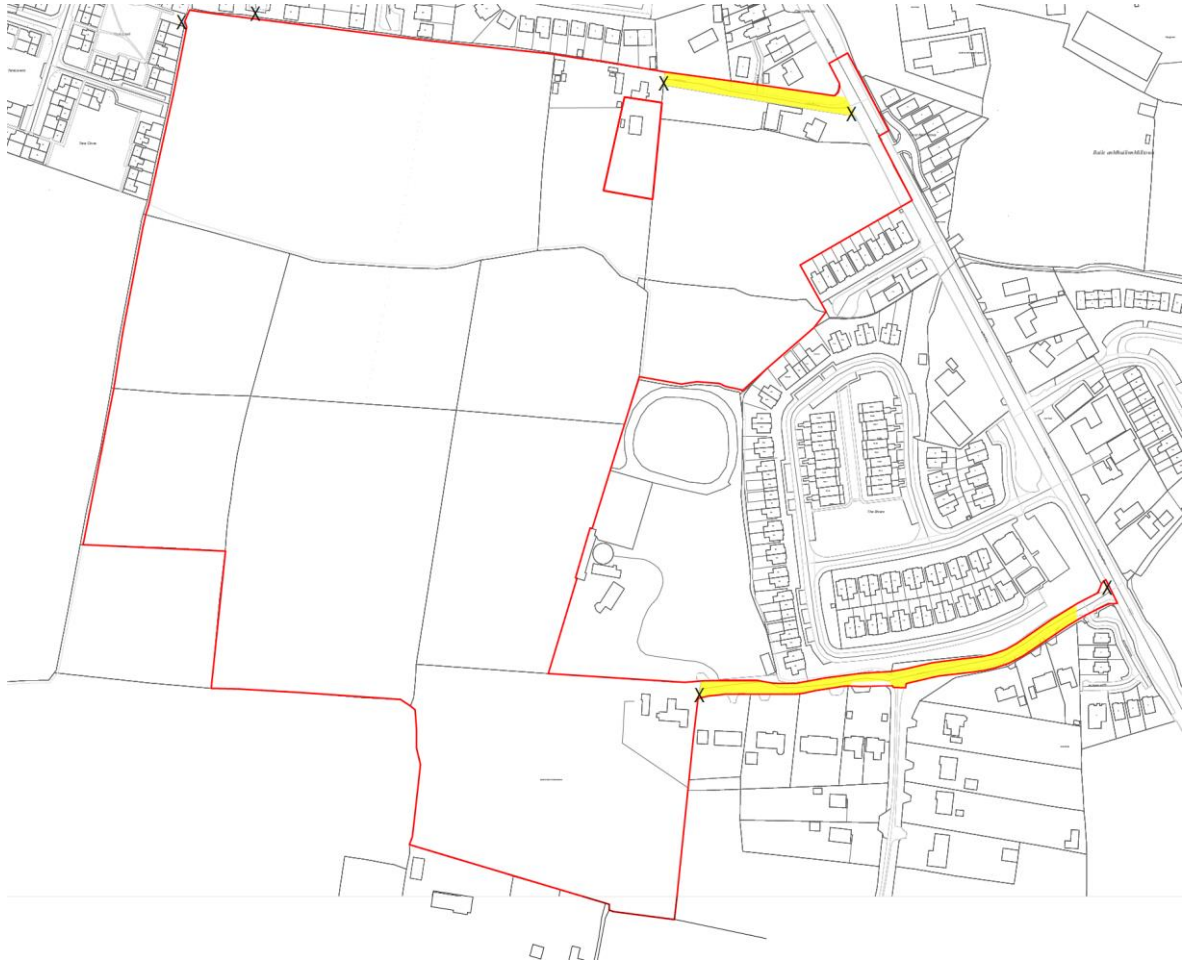


Figure 1. Site Location Map.



Figure 2. Subject Site (indicative boundary outlined in red).

#### 2.1.4. Project Synopsis

A summary of the proposed development includes the following works:

- Demolition of existing buildings on site (c. 659 sq.m in total)
- Residential development (702 no. dwellings)
- 2 no. creche facilities (c. 289 sq.m & c. 384 sq.m)
- 4 no. retail units (c. 106 sq.m, c. 174 sq.m, c. 191 sq.m & c. 469 sq.m)
- 1 no. GP practice / medical use unit (c. 186 sq.m)
- 1 no. basement car park (c. 4,095 sq.m)
- 2 no. undercroft car park areas (c. 466 sq.m & c. 1,466 sq.m )
- Surface car parking
- Surface, basement and undercroft bicycle parking
- Road development / improvement works to the existing Hickey's Lane and Cherry Lane and their junctions with the Dublin Road (R135)
- Public, communal, and private open spaces, and pedestrian and cycle routes/connections
- 7 no. ESB substations
- All ancillary / associated site development works above and below ground, including for bin storage, public lighting, plant (M&E), utility services etc.

A full description of the development proposal can be found in Chapter 2 of Volume II of the EIAR.



### 2.1.5. Demolition

The proposed development includes for the demolition of existing buildings on site i.e., 3 no. detached dwellings (c. 354 sq.m in total) along with their associated outbuildings (c. 305 sq.m). Proposed demolition details can be found on the relevant demolition drawings (Drawing No's. D2101-DL01 to D2101-DL03) prepared by the project architects, Davey + Smith, submitted with the application – please refer to same for details. An Construction & Environmental Management Plan (CEMP) prepared by DBFL Consulting Engineers and a Resource Waste Management Plan (RWMP) prepared by AWN Consulting are also submitted with the planning application.

### 2.1.6. Residential Development

Regarding residential development, in summary, the proposed development proposes to construct of 702 no. dwellings, comprised of 420 no. 2 & 3 storey, 2, 3, 4 & 5 bed houses, 38 no. 2 & 3 bed duplex units in 19 no. blocks, and 244 no. 1, 2 & 3 bed apartments in 20 no. buildings, which range in height from 3-6 storeys. Table 2 below, provides for a summary of the proposed residential unit types / mix.

Dwelling Type	No. of 1 bed units	No. of 2 bed units	No. of 3 bed units	No. of 4 bed units	No. of 3-4 bed units	No. of 4-5 bed units	No. of 3-5 bed units	Total no. of units	Total Percentage (%)
Houses	-	48	185	50	31	80	26	420	60%
Apartments	56	161	26	-	-	-	-	243	35%
Duplexes	-	20	19	-	-	-	-	39	5%
<b>Total</b>	<b>56</b>	<b>229</b>	<b>230</b>	<b>50</b>	<b>31</b>	<b>80</b>	<b>26</b>	<b>702</b>	<b>100%</b>
<b>Percentage (%)</b>	<b>8%</b>	<b>33%</b>	<b>33%</b>	<b>7%</b>	<b>4%</b>	<b>11%</b>	<b>4%</b>	<b>100%</b>	<b>-</b>

Table 2. Summary of proposed unit types / mix.

A wide variety of dwelling typologies and building heights are included for in the project, all dispersed throughout the proposed layout to provide for visual interest, variety and distinctiveness. Further details of same are set out in Section 6.8 of the submitted Planning Statement prepared by Armstrong Fenton Associates and on submitted Drawing No. D2101.S.06 - 'Overall Site Layout 1:1000 (Colour Coded)' – prepared by Dave + Smith Architects, please refer to same.

The proposed layout is based upon are 5 no. character areas dispersed throughout the scheme, each with its own distinct design material palette. This is illustrated in more detail in the submitted Architectural Design Statement prepared by Davey + Smith Architects – please refer to same for details .

### 2.1.7. Non-Residential Development

The proposed development includes for the following non-residential uses:

- 2 no. creche facilities (c. 289 sq.m & c. 384 sq.m)
- 4 no. retail units (c. 106 sq.m, c. 174 sq.m, c. 191 sq.m & c. 469 sq.m)
- 1 no. GP practice / medical use unit (c. 186 sq.m)

#### Proposed Creche Facilities

The project includes for 2 no. creches which are strategically located in the eastern and western halves of the development to ensure that all future residents have ease of access to childcare facilities.

The first of the 2 no. proposed creches is located in Block A at the north-east corner of the layout, adjacent to



Cherry Lane. This facility is a one storey facility located on the ground floor of the block, at the western side of the block. The proposed childcare facility measures c. 289 sq.m and caters for dedicated classrooms in addition to reception, lobby, canteen, storage and bathroom areas etc.

The second of the 2 no. proposed creches is located in Block A1 in the western part of the layout, adjacent to the reserved area for a future school site. This facility is a one storey facility located on the ground floor of the block, at the south-east corner of the block. The proposed childcare facility measures c. 384 sq.m and caters for dedicated classrooms in addition to reception, lobby, canteen, storage and bathroom areas etc.

The proposed creche facilities are capable of accommodating c. 65 no. childcare places (Block A) & c. 110 no childcare places (Block A1) based on the guidance of the Childcare Facilities – Guidelines for Planning Authorities (2001) and the Sustainable Urban Housing: Design Standards for New Apartments (2020).

The proposed creche facilities are strategically located in the eastern and western halves of the development to ensure that all future residents have ease of access to childcare facilities. Each facility is located adjacent to proposed public open space which enhances safe drop off and allows for better ease of access and use.

The internal road network, including for proposed materials, has been designed to further ensure pedestrian priority in the areas surrounding the creches. Each of the proposed creche facilities is provided with an area of outdoor play space which will be treated with an appropriate boundary treatment to ensure safety and enhancement of use – please refer to the landscaping plans prepared by CSR Landplanning and Design submitted with the planning application for further details of same

### **Proposed Retail Units**

The proposed development includes for 4 no. one storey retail units. The location and sizes of the retail units are as follows:

- Located on the ground floor of Block A fronting onto Cherry Lane - c. 174 sq.m
- Located on the ground floor of Block A fronting onto Cherry Lane / Dublin Road (R135) - c. 106 sq.m
- Located on the ground floor of Block A1 fronting onto proposed public open space to the south of the block - c. 191 sq.m
- Located on the ground floor of Block B1 fronting onto proposed public open space to the north of the block) - c. 469 sq.m

The proposed retail units have been strategically located to cater for active frontage along the main access road into the development, at Cherry Lane, and provide for vibrant focal point, or local centre, in the western part of the development centred on a hard landscaped urban plaza area.

The proposed retail units are put forward in recognition of the scale of the proposed development and its future population, who will require conveniently located shopping facilities to serve their needs. As indicated in the existing MCC CDP's vision for 'A2' zoned lands, the proposed retail units will support the establishment of the new residential community by providing for local shopping facilities. The proposed facilities are at an appropriate scale and are ancillary to the primary residential use of the land.

### **Proposed GP Practice / Medical Use Unit**

The proposed development includes for 1 no. one storey GP practice / medical use unit on the ground floor of Block A1 (c. 186 sq.m) fronting onto the internal access road adjacent to the reserved school site.

The proposed GP practice / medical use unit is put forward in recognition of the scale of the proposed development and its future population, who will require services such as medical facilities / doctors to serve their everyday needs. As indicated in MCC CDP's vision for 'A2' zoned lands, the proposed GP practice / medical use unit is considered to support the establishment of the new residential community by providing for required facilities.



Furthermore, its location, adjacent to the reserved future school site, will allow for ease of access for future students of the school should it be developed.

### **Proposed Basement**

The project includes for a basement level car park located beneath Blocks A1. The proposed basement measures c. 4,095 sq.m. Stair core / lift access to the basement level is provided from Block A1 (4 no. cores). The basement provides for 126 no. car parking spaces including for accessible parking spaces for persons with impairments and EV parking spaces. The basement also includes for bin storage and plant areas. Vehicular access to the basement level from the west of Block A1, off the internal road network.

### **Proposed Undercroft Parking Areas**

The project includes for 2 no. undercroft parking areas located at ground floor level of Block A and Block B1.

The proposed undercroft parking area in Block A measures c. 466 sq.m. provides for 16 no. car parking spaces including for accessible parking spaces for persons with impairments. This undercroft area provides for 66 no. bicycle parking spaces. Vehicular access to this undercroft area from the south west of Block A (2 no. access points).

The proposed undercroft parking area in Block B1 measures c. 1,466 sq.m. provides for 53 no. car parking spaces including for accessible parking spaces for persons with impairments. This undercroft area provides for 152 no. bicycle parking spaces. Vehicular access to this undercroft area from the south west of Block B1 (2 no. access points).

## **2.1.8. Car Parking and Bicycle Parking Provision**

Car parking for the proposed development is provided in the form of basement level, undercroft and on-street car parking. In total, the proposed development caters for 1,262 no. car parking space.

For houses, car parking is proposed as a mix of on-street and on-curtilage parking. Where applicable on-street surface car parking for houses is assigned to individual houses. For apartments and duplex units, as well as the proposed non-residential units detailed in Section 1.2.5 of this EIAR, car parking is proposed as a mix of on-street, basement and undercroft parking

For houses, bicycle parking will be accommodated within the curtilage of the property. For apartments and duplex units, as well as the proposed non-residential units detailed in Section 1.2.5 of this EIAR, dedicated bicycle parking spaces are proposed as a mix of on-street, basement and undercroft parking. In total, the proposed development caters for 869 no. dedicated bicycle parking spaces.

Both Chapter 10 of this EIAR 'Material Assets: Transportation' and the submitted Traffic & Transport Assessment (TTA) prepared by DBFL Consulting Engineering provide for further details.

## **2.1.9. Access**

Vehicular access to the proposed development will be via 2 no. access points as follows: (i) off the existing Cherry Lane to the north-east, off the R135 Dublin Road, and (ii) via Hickey's Lane to the south-east, off the R135 Dublin Road, The project includes for road development / improvement works to the existing Hickey's Lane, and Cherry Lane and their junction with Dublin Road (R135).

A letter of consent from Meath County Council for works on lands under their control is enclosed with the planning application - please refer same for details.



The proposed development includes for 1 no. pedestrian / bicycle only access point located off the Dublin Road (R135), and also includes for pedestrian and cycle routes and connections throughout the site.

The proposed layout accommodates for the potential future connection of the proposed road network, including for pedestrians and cycle links, into the adjoining lands to the west and east should it be required in future.

#### 2.1.10. Open Space

The proposed development provides for public open space, including hard & soft landscaping, play equipment & boundary treatments, children's play areas, and a multi-use games area, in compliance with the requirements of the MCC's existing CDP i.e., minimum 15% of the site area provided is as public open space. In total, the proposed development provides for c. 28,885 sq.m. of public open space – please refer to the submitted Planning Statement prepared by Armstrong Fenton Associates for further details of same.

The public open space provision has been strategically designed and located to provide for visual interest and variety, while also catering for links throughout the development. Please refer to the submitted landscaping plans prepared by CSR Land Planning & Design, which accompany the planning application for further details of design and rationale of the public open space provisions. Please also refer to the submitted Planning Statement prepared by Armstrong Fenton Associates which accompanies the planning application for details of the public open space provisions. Please also see submitted Drawing No. D201.S.13. 'Site Layout – Open Space' prepared by Davey + Smith for details.

The proposed development also caters for communal open space and private open space in compliance with the requirements of the guidelines for 'Sustainable Urban Housing: Design Standards for New Apartments' (2020) and, where applicable, MCC's existing CDP. Please refer to the submitted Planning Statement prepared by Armstrong Fenton Associates which accompanies the planning application for full details. In total the proposed development caters for 3,180 sq.m of communal open space. For details of individual private amenity space please refer to the submitted Housing Quality Assessment prepared by Davey + Smith Architects.

#### 2.1.11. Ancillary / Associated Development

The proposed also provides for (i) all ancillary / associated site development works above and below ground, (ii) public open spaces (c.28,885m<sup>2</sup> total), including hard & soft landscaping, play equipment & boundary treatments, (iii) communal open spaces (c.3,180m<sup>2</sup> total) (iv) undercroft, basement, and surface car parking, including for EV, mobility impaired, and car share parking spaces (total 1,262 no. car parking spaces) (v) 869 no. dedicated bicycle parking spaces at undercroft and surface level, including for external bicycle stores & visitor spaces (vi) bin storage, (vii) public lighting, (viii) signage (ix) plant (M&E) & utility services, including for 7 no. ESB sub-stations (x) green roofs, all on an overall application site area of 20.04 hectares.

### 2.2. Construction Management

A Construction and Environmental management Plan (CEMP) has been prepared for the proposed development and considers environmental factors associated with the construction of the proposed development. Prior to the commencement of works, a detailed finalised (CEMP) will be prepared. The contractor will be required to comply with, and implement, the requirements and mitigation measures as set out in this EIAR, and any conditions imposed as part of planning permission.

A Resource & Waste Management Plan (RWMP) has also been prepared for the proposed development and is submitted with the planning application (see Chapter 11 – Appendices). Prior to the commencement of works, a detailed finalised RWMP will be prepared and incorporate all mitigation measures and construction methodologies outlined in this EIAR and provide the baseline requirements off which the contractor will work. The RWMP will remain a live document which will be updated by the contractor as construction progresses to take account of live





requirements imposed by both the planning permission and the site conditions.

An Outline Construction Management Plan (CMP) is submitted with the planning application and on receipt of a grant of planning, and prior to the commencement of works, a detailed finalised Construction Management Plan (CMP) will be prepared. The contractor will be required to comply with, and implement, the requirements and mitigation measures as set out in this EIAR, and any conditions imposed as part of planning permission.

A Construction Traffic Management Plan (CTMP) will be prepared prior to commencement of development works. The CTMP will address traffic management, dust control, road cleaning, and staff parking associated with the construction works.

Certain assumptions are made in the aforementioned documents based on the information available at this time of making the planning application and, for the avoidance of doubt, it is not proposed or intended that the Applicants / contractor(s) are bound by these proposals which may change depending on the timing and circumstances pertaining at the time of construction. Upon receipt of a grant of planning, and prior to the commencement of works, more detailed and finalised documents, taking into account any required amendments, will be prepared and agreed with the Local Authority. The contractor will be required to comply with and implement all mitigation measures and construction methodologies as set out in this EIAR.

All of the aforementioned plans include / will include further information on the construction programme and construction related activities. The plans also address / will address issues relating to site access, compounds, site security, waste management contractors' responsibilities etc.

### **2.2.1. Construction Programme / Phasing**

It is estimated that construction of the project will take approximately five years to complete. A phasing plan accompanies the planning application – please refer to the submitted Drawing No. D2102.S.10 “Overall Site Layout – Phasing Map” prepared by Davey + Smith Architects which illustrates the proposed phasing of the development.

The proposed phasing plan also illustrated / detailed in Chapter 2 of the EIAR (Section 2.4.2.). The intended sequence of development may change post grant of planning permission as a detailed construction programme is dependent on contractor appointment, market and other considerations. Any amendments required to the phasing programme will be discussed and with Local Authority as required. The phasing proposal submitted with the planning application can be summarised as follows:

### **2.2.2. Site Preparation**

The proposed development includes for the demolition of existing buildings on site i.e., 3 no. detached dwellings (c. 354 sq.m in total) along with their associated outbuildings (c. 305 sq.m). These buildings will be demolished in line with the proposed phasing programme detailed in Section 2.4.2. of this chapter.

Excavation works for the proposed basement beneath Block A1 will be required. Excavated material on site will predominantly be re-used on site / on lands within the applicant's control.

The contractor(s) will require connections to the following services / utilities for the duration of the works:

- Water supply
- Foul sewer
- Surface water sewer
- Electricity
- Telecommunications



Existing services / utilities within and adjoining the site will be protected during construction.

### **2.2.3. Construction Activities**

The construction works associated with the proposed development will be contained within the application site boundary. These works will include excavation, earthworks, etc.

Some construction activity may take place off-site, on lands within the control of the Applicants / developer. These activities may include access and haul routes, site compound(s), storage of materials and soil/excavated material, screening and processing of existing materials for re-use within the development works, construction parking, staff welfare facilities etc. These areas will be identified in the finalised CMP.

Subject to the agreement of the Local Authority, the following site operation hours are proposed:

- 07.00 to 19.00 Monday to Friday
- 08.00 to 13.00 on Saturdays
- No works on Sundays or public holidays

During the construction period, due to exceptional circumstances, construction work may be necessary outside the above standard hours. If necessary, this will be agreed in advance with the Local Authority (MCC).

The contractor will be guided by the finalised CMP & RWMP, which will be subject to any changes imposed by condition on any grant of permission or as a result of this EIAR, with regard to re-use, recovery, recycle and disposal of waste produced during construction. Chapter 11 of this EIAR "Material Assets: Resource and Waste Management" also considers the re-use recovery, recycle and disposal of waste arising from the development.

### **2.2.4. Construction Material**

The proposed development will have a requirement for imported materials, primarily concrete, steel, stone and asphalt. The estimated quantities for the overall development are provided in the RWMP. The majority of new materials brought to site will be used immediately, the remainder will be stored within the site boundary.

Material excavated on the site will be used in construction. The re-use of this material reduces the quantity of materials being imported to the site. Prior to use, this material will be subject to appropriate testing to ensure material is suitable for construction. Locations to stockpile this material will be identified by the contractor(s) in the finalised CMP prior to commencement of development.

### **2.2.5. Construction Traffic**

A Construction Traffic Management Plan (CTMP) will be prepared and agreed with MCC by the appointed contractor prior to commencement of development works. The finalised CTMP will outline proposals for construction deliveries and staff accessing the compounds and construction sites.

During all phases of construction access to all existing properties adjoining the development lands will be maintained. Local traffic management procedures will be put in place where required.

Site access / egress routes and construction traffic generation are discussed in the TTA prepared by DBFL Consulting Engineers.



## 2.3. Alternatives Examined

Chapter 2 of the EIAR (Volume II) includes a summary of alternatives which were considered for the proposed development of the subject lands. These options were considered as the scheme progressed and the key considerations and amendments to the design having regard to the key environmental issues pertaining to the lands are summarised in this section of the EIAR. Alternative examined are summarised below and fully detailed in Volume II of the EIAR.

### 2.3.1. Alternative Locations

The location and type of development proposed has been determined by the land use zoning objectives contained in the existing Meath County Development 2021-2027 (CDP), which has been environmentally assessed and statutorily adopted. The subject site is currently zoned for residential development (i.e., Objective 'A2' – 'New Residential' ) in the existing CDP, with the vision for 'A2' zoned lands being the objective to:

*"To provide for new residential communities with ancillary community facilities, neighbourhood facilities as considered appropriate." The existing Meath County Development 2021-2027 goes on to state that 'A2' zoned lands are: "the primary zone to accommodate new residential development. Whilst residential zoned lands are primarily intended for residential accommodation, these lands may also include other uses that would support the establishment of residential communities. This could include community, recreational and local shopping facilities. These facilities must be at an appropriate scale and cannot interfere with the primary residential use of the land."*

A portion of the site ( c. 1 Ha), at the western boundary, is zoned for community infrastructure (i.e., Objective 'G1'- Community Infrastructure') in the existing CDP, with the vision for 'G1' zoned lands stated in the CDP as being the objective to:

*"To provide for necessary community, social, and educational facilities."*

The proposed site layout has been designed to comply with the above individual zoning objectives attached to the site i.e., zoning objective A2 & G1

Furthermore, the subject site forms the vast majority of an identified master plan area in Ashbourne i.e., Master Plan 18 of the Written Statement for Ashbourne contained in the existing CDP / 'MP 18' on the Ashbourne Land Use Zoning Map contained in the existing CDP.

The Written Statement for Ashbourne contained in the existing CDP states that on the MP 18 lands:

*"It is intended that these lands shall provide a primary school site, lands for recreational uses, including playing fields, and lands for residential development. The development of the lands shall be on a phased basis to be agreed as part of the preparation of the Master Plan."*

The master plan has been agreed with Meath County Council prior to the submission of the subject application and a phasing plan is proposed as part of the subject application.

Given the objectives for the subject site detailed in the existing MCC CDP, apart from localised interpretation of the existing CDP and its development management standards, no alternative sites were considered in this EIAR as the development of this site for the uses proposed has been identified as a strategic objective of the existing MCC CDP.

This approach is compliant with the EPA Guidelines (2022) which recognises that it is not realistic to consider alternative options for projects which have been previously determined by a higher plan: *"Clearly, in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant 'alternative location' .....Higher level alternatives may already have been addressed during the strategic*



*environmental assessment of relevant strategies or plans.” (EPA Guidelines, 2022, Section 3 pg 33)*

Taking all of the aforementioned into consideration, it is put forward that the most logical and practical location solution to addressing the current housing shortage is through facilitating the development of zoned lands available for residential use. The subject site comes within this category and therefore it seems appropriate that the proposed development is sited here.

### **2.3.2. Alternative Uses**

As the existing MCC CDP, approved and adopted by MCC, already provides a strategic framework indicating the manner in which the site may be developed, the range of alternative use was therefore lessened.

The subject site is currently in greenfield condition, in the majority in agricultural use, and have no relevant extant grant of permission for similar residential development attached to them.

The subject site is currently zoned for residential development (i.e., Objective ‘A2’ – ‘New Residential’ ) in the existing CDP with a portion of the site ( c. 1 Ha), at the western boundary, is zoned for community infrastructure (i.e., Objective ‘G1’-Community Infrastructure’).

The proposed site layout has also been designed to comply with the above individual zoning objectives attached to the site i.e., zoning objective A2 & G1

Furthermore, the subject site forms the vast majority of an identified masterplan area in Ashbourne i.e., Master Plan 18 of the Written Statement for Ashbourne contained in the existing CDP / ‘MP18’ on the Ashbourne Land Use Zoning Map contained in the existing CDP.

The Written Statement for Ashbourne contained in the existing CDP states that on the MP 18 lands: *“It is intended that these lands shall provide a primary school site, lands for recreational uses, including playing fields, and lands for residential development. The development of the lands shall be on a phased basis to be agreed as part of the preparation of the Master Plan.”*

The master plan has been agreed with Meath County Council prior to the submission of the subject application and a phasing plan is proposed as part of the subject application.

Based on all the above, it is evident that the Local Authority supports the provision of residential development on the subject lands. As such, the development proposal in this case considered alternatives which are in keeping with the local, regional and national guidelines.

The main alternative use for the subject lands would be to maintain its current agricultural use. In any event, it is envisaged that in the long term, these lands will be developed for residential purposes to accommodate much needed new housing.

Given the objectives for the subject site detailed in the existing MCC CDP, no alternative uses were considered in this EIAR as the development of this site for the uses proposed has been identified as a strategic objective of the existing MCC CDP.

This approach is compliant with the EPA Guidelines (2022) which recognises that it is not realistic to consider alternative options for projects which have been previously determined by a higher plan: *“Clearly, in some instances some of the alternatives described below will not be applicable.....Higher level alternatives may already have been addressed during the strategic environmental assessment of relevant strategies or plans.” (EPA Guidelines, 2022, Section 3 pg 33).*



### 2.3.3. Alternative Layouts

The proposed development has been prepared in accordance with the requirements of the National Planning Framework, the Eastern & Midlands Regional Spatial and Economic Strategy and the relevant Section 28 Guidelines including those relating to Urban Development and Urban Heights (2018), the Apartment Guidelines (2020) and the Sustainable Residential Development in Urban Areas (2009) as well as, where applicable, the Meath County Development Plan 2021-2027. Furthermore the proposed development has been the subject of pre-application consultation meetings with both Meath County Council (i.e. the Section 247 meeting between the applicants and the Local Authority) and An Bord Pleanála / Meath County Council (i.e. the tri-partite pre-application consultation meeting for strategic housing development applications).

Insofar as the EIA is concerned, a number of iterations of the site layout and alternative designs were prepared and considered for the project. This involved taking into account the various technical and environmental considerations which are addressed in the EIA, and which informed the design of the proposed development.

The design parameters for the development proposal are set down in the first instance in the existing CDP which has determined the land use zoning and appropriate uses for the site. The development proposal has been guided by detailed discussions with the relevant Local Authority departments, including for Planning, Roads & Traffic, Parks, and Water and Drainage etc. prior to the proposed development being prepared. These detailed discussions highlighted the issues to be addressed, such as residential mix, the building height, density, access, and other physical characteristics.

Alternative site layouts and siting progressed throughout the design process in order to minimise the impact on the receiving environment at the earliest opportunity. The initial stage involved a constraints analysis of the land within the proposed development site to identify all high-level constraints and aggregate them against the site to allow a suitable layout to be developed.

The final layout now put forward for assessment pays cognisance to An Bord Pleanála's Opinion (Pre-application Consultation Ref. 312246-21) in relation to density, transport routes, and the design and layout of public open spaces. The proposed development has also had regard to the following Section 28 Ministerial Guidelines: (i) Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009) which refer to minimum net densities of 35 dwellings on greenfield sites and encourage development at a sufficiently high density to provide for an efficiency in serviceable land usage and (ii) the Guidelines for Planning Authorities on Building Heights and Urban Development, 2018 and their SPPRs.

The proposed layout represents the best utilization of these zoned lands with the development. In terms of design, the proposed layout constitutes the best option for housing, which accords with both of the zoning objectives attached to the site, while also protecting and replenishing the environment as necessary.

In summary, the proposed development will *inter alia* :

- Provide an appropriate and in demand mix of housing typologies which respect the existing pattern of development in the area
- Comply with MCC's detailed quantitative standards for residential development as set out in the existing MCC CDP and, where applicable, the Section 28 Ministerial Guidelines "Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities" (2020)
- Preserve the natural amenity characteristics of the site, in particular to ensure that the visual impact of the development is minimised. This has been achieved by allocating areas of open space for recreation, all of which will be developed in accordance with the overall Landscape Masterplan for this proposed development. The design and layout of the proposed development also takes into consideration appropriate development densities along with the need for a variety of dwelling types and sizes so as to encourage



social mix and choice whilst also ensuring that the design makes use of material, architectural form and colour to create a high level of visual amenity.

The final design now put forward for permission presents the most effective utilization of this significant site whilst also fulfilling the objectives of MCC's CDP by providing for long term, sustainable housing for which there is a considerable demand at present.

It is put forward that the final layout for the proposed residential development optimizes development space within the overall site, facilitates ready access to all parts of the scheme, avoids significant visual and landscape impact, and provides for an appropriate level of ancillary facilities.

The proposed layout is also put forward with regard to feedback received from MCC at the S.247 pre-application meeting, considers the existing CDP's objectives for the subject site, and has regard to feedback from ABP at the pre-application tri-partite meeting. As such, while alternative layouts were considered the final layout now put forward for permission protects the existing amenity in the immediate environs, takes on board the comments of the Local Authority / ABP and will ensure the subject site is development in an efficient and appropriate manner.

#### 2.3.4. Alternative Processes

This is a residential led / urban development and therefore there are no alternative processes to be considered.

### 2.4. Do Nothing / Maximum / Minimum Alternatives

#### 2.4.1. The "Do Nothing" Scenario

The "Do Nothing" Scenario describes the impacts of the proposed development if it would not transpire. The positive benefits to the national, regional, and local community arising from implementing the proposed development of this site would not materialize in the "Do Nothing" scenario. This alternative is therefore not attractive.

In addition, the "Do Nothing" scenario would result in non-compliance with the National Planning Framework (NPF) (and other recent national planning policy documents / Section 28 Ministerial Guidelines) which contains the following relevant objectives amongst others:

- **National Policy Objective 3a** - Deliver at least 40% of all new homes nationally, within the built-up footprint of existing settlements;
- **National Policy Objective 32** - To target the delivery of 550,000 additional households to 2040.

#### 2.4.2. The "Do Maximum" Scenario

The "Do Minimum" Scenario in the present instance could involve the construction of the subject site at a low density however, the current proposal is supported by national and regional planning policy to provide housing and intensify land use through increased densities in areas within walking distance of key transport routes.

Alternatively, the "Do Minimum" scenario could involve the construction of the site over a number of phases / planning permissions. While this alternative may reduce the level of construction activity in the short term, it is considered that it would have the effect of spreading construction over a longer period of time.

The "Do-Minimum" scenario would also result in reduced efficiencies in construction and delays in implementation of these residentially zoned lands.

#### 2.4.3. The "Do Maximum" Scenario



The “Do Maximum” Scenario in the present instance could involve the construction of the entire site in one phase of development, i.e., 702 no. residential units and ancillary uses. This would involve a greater degree of disruption to the receiving environment in the short term. This alternative was discounted on the basis of practical considerations relating to phasing of development, funding and feasibility.



## 3.0. Non-Technical Summary of EIAR Chapters

### 3.1. Population and Human Health

This chapter of the EIAR has been prepared by Armstrong Fenton Associates Planning Consultants (Tracy Armstrong, BA, MRUP, MIPI, MRTPI) and provides an assessment of the potential impacts of the proposed development on human beings, population, and human health in the vicinity of the development site and an assessment of these issues.

One of the principal concerns in the development process is that people, as individuals or communities, should experience no diminution in their quality of life from the direct or indirect impacts arising from the construction and operation of a development. Ultimately, all the impacts of a development impinge on human beings, directly and indirectly, positively and negatively.

#### 3.1.1. Potential Construction and Operational Phase Impacts

##### Construction Phase

In the absence of mitigation, potential impacts on population and human health as a result of the construction phase of the proposed development may be summarised as follows:

- Nuisance due to dust generating activities
- Nuisance and disturbance due to noisy activities and vibration
- Negative impacts on journey characteristics, parking availability and noise due to construction traffic
- Negative visual impacts due to presence of construction site
- Positive direct and indirect economic impacts due to construction employment and increased demand for local businesses, suppliers and other supporting services; and
- Negative impacts on site personnel and local community due to improper construction site waste management.

Overall, subject to adherence to best practice and implementation of appropriate mitigation measures detailed below and elsewhere in this EIAR, the overall temporary impacts associated with the construction phase (excluding employment, which will be positive) are considered to be negative and slight/moderate.

##### Operational Phase

The duration of the operational phase of the proposed development is assumed to be long-term in duration, as per the definitions in the EPA 2022 EIAR Guidelines.

The existing Meath CDP sets out the overall land use patterns for the county including the lands on which the project is proposed. The nature of the development is permanent and will act as a catalyst for the future development in the area, as provided for in the settlement plans.

The proposed development will comply with the statutory land use zoning policies and objectives of the Meath CDP and the Government's National Planning Framework (NPF). Development of the site will align with the NPF's high-level objective to achieve compact, sustainable growth and, in doing so, will realise the efficient use of currently vacant greenfield lands with medium density housing.

In the absence of mitigation, potential impacts on population and human health as a result of the operation of the proposed development may be summarised as follows:





- Nuisance and disturbance of residents due to noisy building services plant and vehicular deliveries / collections within the site
- Negative impacts on journey characteristics due to additional operational phase traffic generated by the proposed development
- Positive impacts on pedestrians and cyclists due to enhanced permeability and provision of public realm which prioritises these users
- Nuisance and disturbance due to increased traffic volumes arising from operation of proposed development
- Visual impacts due to completion of proposed development, establishing significant new residential development
- Direct and indirect positive socioeconomic impacts due to employment opportunities and increased demand for goods and services from local businesses
- Positive impacts on existing and new residents due to provision of new facilities i.e., creche as well as direct links to local services, facilities and amenities
- Positive socioeconomic impacts due to provision of significant additional housing; and
- Negative impacts on residents and local community due to improper waste management.

### 3.1.2. Mitigation

#### Construction Phase

- Restrict working hours from 07.00 to 19.00 Mondays to Fridays inclusive, between 09.00 to 13.00 on Saturdays. No general works are envisaged to be carried out on Sundays. Should there be a need to work Sundays/Bank Holidays, a written request will be made to MCC for permission to do so. Any conditions from MCC relating to out of hours working will be followed including any required notifications to relevant parties
- Maintain a Traffic Management Plan (TMP) in effect for duration of works
- Adherence to the CMP & CDWMP
- A CEMP will be agreed with the Planning Authority upon receipt of planning permission. The construction of the proposed development shall adhere to the relevant provisions of this Plan; and;
- As part of the CEMP, maintain a Dust and Noise abatement plan in operation.

#### Operational Phase

The proposed development has been designed to avoid significant impacts in relation to local amenities and recreational facilities by:

- Incorporating the provision of a new childcare facilities within the design proposal.
- Incorporating the provision of a new local services by including for 4 no. retail units and 1 no. GP /medical use unit within the design proposal.
- Reserving a site to accommodate a potential new primary school, dependent on confirmation from the Department of Education and Skills for the need for same.
- The provision of c. 28,912 sq.m of public open space representing c. 15.5% of the 'A2' zoned residential lands



- Providing new pedestrian and cyclist links to local amenities and facilities.

Accordingly, no further mitigation measures are required.

### 3.2. Biodiversity

This chapter of the EIAR was authored by Siofra Quigley, Senior Consultant Ecologist, of Scott Cawley Ltd., and reviewed for quality assurance purposes by Niamh Burke of Coiscéim Consulting Ltd., and by Colm Clarke of Scott Cawley Ltd.

The chapter considered the potential direct, indirect and cumulative impacts on biodiversity within the zone of influence of the proposed development. The proposed development consists of a strategic housing development with 702 number residential units, associated ancillary roads, drainage pumping and services infrastructure, located in Milltown Ashbourne, Co. Meath. The assessment was undertaken in line with a number of guidance documents including the *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018 as updated September 2019).

#### 3.2.1. Methodology

Baseline ecology surveys were undertaken at the proposed development site in 2020, 2021 and 2022 and included:

- Habitat and flora surveys;
- Breeding bird surveys;
- Wintering bird survey;
- Building inspection surveys;
- Mammal surveys; and
- Bat surveys.

#### 3.2.2. Ecological receptors

The following key ecological receptors were identified within or occurring within the zone of influence of the proposed development site:

- Treelines (WL2);
- Hedgerows (WL1);
- Foraging/commuting bats;
- Breeding birds;
- Small mammals;
- Badgers;
- Otter; and
- Amphibians

In addition, European and Nationally designated sites were identified as key ecological receptors.

#### 3.2.3. Assessment

The proposed development site does not overlap with any European or nationally designated sites. The proposed development does not overlap with any European sites. The nearest European sites are Malahide Estuary SAC and Malahide Estuary SPA, located c. 12.6km and c. 12.7km east of the proposed development, respectively. The nearest surface water feature to the site, the Fairyhouse Stream is located c. 300m south of the proposed development. This stream flows c. 3.2km downstream in a south-easterly direction, where it joins with the Broadmeadow River. The Broadmeadow River flows for a further 11.3km downstream where it ultimately



discharges into the Malahide Estuary, and subsequently, the European sites therein *i.e.*, Malahide Estuary SAC and Malahide Estuary SPA. During construction, contaminated surface waters could potentially be transferred to downstream European and National sites via this drainage connection.

Foul waters from the proposed development will join the public sewer and will be treated at the Ringsend WWTP prior to subsequent discharge to Dublin Bay. Therefore, there is an indirect hydrological link between the proposed development site and Dublin Bay, and the European sites within, *i.e.*, South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, and North Bull Island SPA. These European sites are considered to be within the potential zone of influence of the proposed development, as all of these sites are located downstream of the proposed development site within Dublin Bay.

Despite these viable connections, as concluded in the Hydrological and Hydrogeological qualitative risk assessment (AWN, 2022), Appropriate Assessment Screening (submitted alongside the planning documents) and 'Biodiversity' chapter reports contained in the EIAR, there will be no likely significant effects on any European or National sites arising from this linkage during construction or during the operation of the proposed development.

### 3.2.4. Potential Impacts

#### **Construction Phase**

Potential impacts arising from the proposed development during the construction phase are considered to be; accidental pollution incident affecting surface water quality, surface water run-off of sediments and/or pollutants affecting surface water quality, habitat loss, fragmentation and degradation, disturbance and displacement of fauna species, loss of potential nesting/roosting sites, and artificial lighting impacts.

#### **Operational Phase**

Potential impacts arising from the proposed development during the operational phase are considered to be; surface water run-off of sediment and/or pollutants, disturbance and displacement of fauna species, and artificial lighting impacts.

### 3.2.5. Mitigation

The proposed landscape plan has been developed in order to retain as much of the existing landscape as possible, and where this is not possible, extensive compensatory planting of native hedgerows and treelines are proposed. Diverse meadow mix planting is also proposed which will benefit the overall biodiversity of the proposed development site. The inclusion of a attenuation ponds and the proposed addition of numerous other SuDS measures incorporated into the design will greatly reduce the impact the proposed development will have on the local receiving environment.

A comprehensive suite of mitigation measures have been proposed, in addition to the design considerations summarised above. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect biodiversity and the receiving environment. Considering the elements included within the design of the proposed development, and the implementation of the mitigation measures in the associated planning application documents to avoid or minimise the effects of the proposed development on the receiving environment, no likely long-term significant residual effects on biodiversity are predicted.



### 3.3. Lands, Soil & Geology

This chapter has been prepared by Brendan Manning BEng (Hons) CEng MIEI, who has over 10 years' experience in civil engineering and the construction industry. This chapter of the EIA comprises of an assessment of the likely impact of the proposed development on soils and the geological environment, as well as identifying mitigation measures to minimise any impacts.

#### 3.3.1. Assessment Methodology

Description of the baseline environment and the assessment of the likely impact of the proposed development on soils and the geological environment included the following activities:

- Preliminary Ground Investigations.
- Review of information available on the Geological Survey of Ireland (GSI) online mapping service.
- Preliminary Ground Investigations for the proposed development were carried out by IGSL in July 2022 and included the following scope of work within the subject site:
  - 7 No. Trial Pits.
  - 7 No. Infiltration Tests.

#### 3.3.2. Receiving Environment

##### Soils

The Soil Map of Ireland (1980) indicates the predominant soil type in the Ashbourne area as "Limestone and shale drift and Irish sea drift". The vast majority of the site is underlain by a subsoil layer described as "till derived from limestones".

A Preliminary Site investigation carried out by IGSL indicate that the subsoil material generally comprises stiff brown/dark gravelly clay. Stiff and silty sandy gravelly clay is also present.

##### Geology

The proposed development site is underlain by Visean limestone & calcareous shale. The GSI bedrock aquifer map indicates an 'LI Aquifer', Locally Important Aquifer

##### Radon

A review of the EPA's online mapping service ("Radon Map") shows that less than 1% of the homes within the site area is estimated to be above the reference level of 200 becquerel per cubic metre (Bq/m<sup>3</sup>).

#### 3.3.3. Do Nothing Scenario

There will be no impact on soils and the geological environment if the development does not proceed.

#### 3.3.4. Construction and Operational Phase Impacts

##### Construction Phase

##### **Stripping of Topsoil**

Removal of the existing topsoil layer will be required across the site. It is expected that all stripped topsoil will be reused on site (incorporated into landscaping of back gardens and public open spaces).



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 runoff. The impact of these works will have a slight impact and negative effect over the short term.

### **Excavation of Subsoil Layers**

Excavation of existing subsoil layers will be required. Where feasible, excavated material will be reused as part of the site development works (e.g., use as fill material beneath houses and roads) however, unsuitable excavated subsoil is expected and will have to be removed to an approved landfill. The impact of these works will have a slight impact and negative effect over the short term. To negate the need for soil and sub-soil to be removed or imported for the proposed works finished building levels etc for the subject lands have been optimized

### **Construction Traffic**

Earthworks plant (e.g. dump trucks) and vehicles delivering construction materials to site (e.g. road aggregates, concrete deliveries etc.) have potential to cause rutting and deterioration of the topsoil layer and any exposed subsoil layers, resulting in erosion and generation of sediment laden runoff. The impact of these works will have a slight impact and neutral effect over the short term.

### **Accidental Spills and Leaks**

During the construction phase there is a risk of accidental pollution from the sources noted below.

- Storage of oils and fuels on site
- Oils and fuels leaking from construction machinery
- Spillage during refueling and maintenance of construction machinery
- Use of cement and concrete during construction works

It is considered that impact of any accidental spills or leaks could have a significant negative effect over the short term. However, with the implementation of mitigation measures the residual effect is minimised and it is considered unlikely that any accidental spills or leaks would occur.

### **Geological Environment**

Therefore, it is not expected that the installation of drainage will require excavation of bedrock. Notwithstanding this, excavations associated with development of the site have been designed as shallow as possible in the unlikely event that rock is encountered. Where bedrock is encountered it will be crushed, screened and tested for use within the designed works.

Based on the above and the fact that rock was not encountered it is considered unlikely that there will be any effect on the bedrock geology during construction. Without the consideration of mitigation measures the construction phase of the proposed development will likely have a Neutral, Short Term, Moderate cumulative impact.

### **Operational Phase**

On completion of the construction phase, there will be no further impact on soils and the geological environment.



### 3.3.5. Cumulative Impacts

It is considered that the overall cumulative development in this area will have a moderate, long term impact on the land, soils and geology of the area however, with the detailed mitigation measures in place the overall impact on land and soils will be permanent, not significant and have a neutral effect.

### 3.3.6. Mitigation

#### **Construction Phase**

##### **Stripping of Topsoil**

Stripping of topsoil will be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development. At any given time, the extent of topsoil strip (and consequent exposure of subsoil) will be limited to the immediate vicinity of active work areas. Topsoil stockpiles will be protected for the duration of the works and not located in areas where sediment laden runoff may enter existing surface water drains. These stockpiles will be monitored throughout the construction phase. Topsoil stockpiles will also be located so as not to necessitate double handling.

##### **Excavation of Subsoil Layers**

The design of road levels and finished floor levels has been carried out in such a way as to minimise cut/fill type earthworks operations. The duration that subsoil layers are exposed to the effects of weather will be minimised. Disturbed subsoil layers will be stabilized as soon as practicable (e.g. backfill of service trenches, construction of road capping layers, construction of building foundations and completion of landscaping). Similar to stripped topsoil, stockpiles of excavated subsoil material will be protected for the duration of the works. Stockpiles of subsoil material will be located separately from topsoil stockpiles. These stockpiles will be monitored throughout the construction phase. Monitoring of ground conditions and stability of excavations will be monitored on an on-going basis. Measures will be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds, surface water inlet protection and earth bunding adjacent to open drainage ditches).

##### **Weather Conditions**

Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excavations with an objective of minimising soil erosion and silt generation. The approach of extreme weather events will be monitored to inform near-term operational activities.

##### **Surface Water Runoff**

Surface water runoff from areas stripped of topsoil and surface water collected in excavations 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. Monitoring of these sediment control measures will be undertaken throughout the construction phase. Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds. On-site settlement ponds are to include geotextile liners and riprapped inlets and outlets to prevent scour and erosion. Concrete batching will take place off site, wash down and wash out of concrete trucks will take place off site and any excess concrete is not to be disposed on site. Surface water discharge points during the construction phase are to be agreed with Meath County Council's Environment Section prior to commencing works on site.



### **Water Pumped from Excavations**

Rainwater pumped from excavations is to be directed to on-site settlement ponds. Groundwater pumped from excavations is to be directed to on-site settlement ponds. On-site settlement ponds are to include geotextile liners and riprapped inlets and outlets to prevent scour and erosion. Monitoring of same will be undertaken. Surface water discharge points during the construction phase will be agreed with Meath County Council prior to commencing works on site.

### **Construction Traffic**

Earthworks plant and vehicles delivering construction materials to site will be confined to predetermined haul routes around the site. Vehicle wheel wash facilities will be installed in the vicinity of any site entrances and road sweeping implemented as necessary in order to maintain the road network in the immediate vicinity of the site. The cleanliness of the adjacent road network will be monitored throughout the construction phase. Dust suppression measures (e.g. dampening down) will be implemented as necessary during dry periods. A construction traffic management plan will be prepared by the contractor prior to any works commencing on site.

### **Accidental Spills and Leaks**

In order to mitigate against spillages contaminating underlying soils, all oils, fuels, paints and other chemicals will be stored in a secure bunded hardstand area. Refueling and servicing of construction machinery will take place in a designated hardstand area which is also remote from any surface water inlets and outlets (when not possible to carry out such activities off site). A response procedure shall be put in place to deal with any accidental pollution events and spillage kits shall be available and construction staff will be familiar with the emergency procedures and use of the equipment. Monitoring of all fuel / oil storage areas will be undertaken and spill kits will be available on site.

### **Geological Environment**

A more detailed Ground Investigation will be undertaken prior to construction to verify the Preliminary Ground Investigation and where possible the works will be designed to minimize the bedrock excavation required. At any given time, the extent of exposed bedrock will be limited to the immediate vicinity of active work areas. Where bedrock is encountered, it will be crushed, screened and tested for use within the designed works to reduce the volume of material required to leave site. This will also reduce the volume of material to be imported to the site. With the consideration of mitigation measures the construction phase of the proposed development will likely have an overall Neutral, Short Term, imperceptible residual impact.

### **Operational Phase**

For the operational phase no specific mitigation measures are proposed as there will be no further impact on soils and the geological environment.

### **3.3.7. Monitoring**

Proposed monitoring by the main contractor during the construction phase in relation to the soil and geological environment are as follows:

- Adherence to the Construction and Environmental Management Plan (CEMP).
- Construction monitoring of the works (e.g. inspection of existing ground conditions on completion of cut to road sub-formation level in advance of placing capping material, stability of excavations etc.).
- Inspection of fuel / oil storage areas and having spill kits available to hand.
- Monitoring cleanliness of adjacent road network, implementation of dust suppression and provision of vehicle wheel wash facilities.



- Monitoring of contractor's stockpile management (e.g. protection of excavated material to be reused as fill, protection of soils for removal from site from contamination).
- Monitoring sediment control measures (sediment retention ponds, surface water inlet protection etc.).

No ongoing monitoring is proposed on completion of the construction phase

### 3.4. Water & Hydrology

This chapter of the EIAR has been prepared by Brendan Manning BEng (Hons) CEng MIEI, who has over 10 years' experience in civil engineering and the construction industry. This chapter of the EIAR comprises of an assessment of the likely impact of the proposed development on the surrounding surface water and hydrogeological environments, as well as identifying proposed mitigation measures to minimise any impacts.

#### 3.4.1. Methodology

Assessment of the likely impacts of the proposed development on the surrounding surface water and hydrogeological environments included the following:

- Site inspection / walkover undertaken on 4<sup>th</sup> of February 2022. No flooding or poor ground conditions observed.
- Review of existing topographic survey information.
- Preliminary ground investigation carried out by Ground Investigations Ireland Limited in April 2019 of 7 No. trial pits and 7 No. infiltration tests.
- Review of utility records obtained from Meath County Council (MCC).
- Review of Planning Applications in the area with the use of the MCC Online Planning Applications Service.
- Review of information available on the Environmental Protection Agency (EPA) online mapping service. Use of the 'Water Features' layer to determine the water bodies in the vicinity of the site.
- Review of information available on the Geological Survey of Ireland (GSI) online mapping service. Use of the 'Groundwater Aquifer' and 'Groundwater Vulnerability' layers to determine the groundwater features.
- Review of Office of Public Works (OPW) National Flood Hazard Mapping and Catchment Flood Risk Assessment and Management Studies (CFRAM Studies).
- Review of Ashbourne Local Area Plan 2009-2015.
- Review of Meath County Development Plan 2021-2027.

Surface water runoff calculations were carried out in accordance with the following guidelines:

- Greater Dublin Strategic Drainage Study (GDSDS) - <http://www.greaterdublindrainage.com/wp-content/uploads/2011/11/GDSDS-Final-Strategy-Report-April-051.pdf>

#### 3.4.2. Baseline Scenario

##### Hydrology

The subject site is within the Broad Meadow River Catchment. Below the subject site is the Fairyhouse stream which is a tributary to the Broad Meadows River. It is proposed to outfall the attenuated surface water from the southern site to the ditch located south of the site which flows into the Fairyhouse stream. The surface water network from the northern half site will outfall to the ditch located beside the Dublin Road which in turn will flow into the Fairyhouse stream and then into the Broad Meadow River. The site is part of a single surface water catchment and is currently drains to the Broad Meadow River.





The calculated allowable surface water runoff for the northern site has been calculated as 41.73 l/s for the whole development. It has been determined that a total attenuation volume of 3904m<sup>3</sup> for the whole development will therefore be required to accommodate for the 100-year storm event (a 20% provision for climate change included), as required by the Greater Dublin Strategic Drainage Strategy.

### **Hydrogeology**

The Geological Survey Ireland (GSI) Online Data Services classifies the aquifer at the subject site as “Locally Important Aquifer – Bedrock which is moderately productive only in local zones”. GSI classifies the site’s groundwater vulnerability as low. Seven soakaway test locations and seven trial pits locations were carried out to depths ranging from 2.5m to 3.1m below existing ground level. Groundwater was encountered at depths of 1.8m, and 2.4m below ground level respectively. Each of the soakpits had adequate infiltration except for one which had 0, all attenuation has been adopted in all attenuation calculations systems proposed was used for this assessment. During construction, it is anticipated that the deepest excavations will be for the installation of surface water drainage lines and attenuation tanks (up to approximately 4.0m deep).

### **Flood Risk**

DBFL Consulting Engineers have undertaken a separate Site-Specific Flood Risk Assessment (SSFRA) which is included with the planning application documentation. Based on historical Eastern Catchment Flood Risk Assessment and Management flood mapping, the entire whole of the site is in Flood Zone C (i.e., not at risk of flooding). Sustainable Drainage Systems (SuDS) will be employed to serve the proposed development, ensuring that only clean attenuated surface water from the development will discharge to the Broad Meadow River and the Fairyhouse stream. Discharge will be restricted to greenfield runoff levels via flow control devices. The proposed development layout design is in accordance with the required standards and will attenuate run-off by providing approximately 3,482m<sup>3</sup> of storm-water storage. Therefore, the design will not cause impacts or increase the risk of flooding elsewhere or in adjacent areas.

#### **3.4.3. Do Nothing Scenario**

There are no predicted impacts should the proposed development not proceed.

#### **3.4.4. Potential Construction and Operational Phase Impacts**

##### **Construction Phase**

- Surface water runoff may contain increased silt levels (e.g. runoff across areas stripped of topsoil) or become polluted by construction activities (Run off from vehicles, cement, oil spills etc).
- Discharge of rainwater pumped from excavations containing increase levels of silt, oil, cement, etc.
- Accidental spills and leaks associated with storage of oils and fuels, leaks from construction machinery and spillage during refuelling and maintenance contaminating the surrounding surface water and hydrogeological environments.
- Concrete runoff, particularly discharge of wash water from concrete trucks.
- Discharge of vehicle wheel wash water containing high silt levels, oil and fuels, cement (potential impact on existing hydrology e.g. discharge to existing surface water drainage infrastructure).
- Discharge of foul water drainage from contractor’s compound (impact on existing hydrology e.g. cross-contamination of existing surface water drainage).
- Infiltration of groundwater into excavations.
- Cross-contamination of temporary potable water supply to construction compound.



Without the consideration of mitigation measures the construction phase of the proposed development will likely have a Neutral, Short Term, Moderate impact.

### **Operational Phase**

Potential operational phase impacts are noted below:

- Increased impermeable surface area will reduce local groundwater recharge rate.
- Increased impermeable surface area will potentially increase surface water runoff rate (if not attenuated to greenfield run-off rate).
- Accidental hydrocarbon leaks and subsequent discharge into piped surface water drainage network (e.g., along roads and in driveway areas).

As noted, surface water outflow from the site ultimately discharges to the Broad Meadow River which flows into the Irish sea at Malahide. If surface water is not adequately treated and managed it has the potential to impact aquatic life and human health.

Surface water drainage for the development has been designed in accordance with the GSDSDS therefore the risk to human health has been mitigated.

These impacts are likely and are expected to be slight, permanent and have a neutral effect on the environment.

### **3.4.5. Mitigation Measures**

#### **Construction Phase**

- A Construction and Environmental Management Plan will be submitted with the application documentation and will be implemented by the contractor during the construction phase. Site inductions will include reference to the procedures and best practice as given in the CEMP.
- All water pumped from excavations will be directed to on-site settlement ponds for treatment to reduce pollution to acceptable levels before being discharged to the local environment at a controlled rate.
- Surface water runoff from areas stripped of topsoil, from the construction compound, and from access tracks will be directed to on-site settlement ponds for treatment to reduce pollution to acceptable levels before being discharged to the local environment at a controlled rate.
- Weather conditions and seasonal weather variations will be taken into account when planning stripping of topsoil and excavations, with an objective of minimizing soil erosion and silt run-off. Short term weather forecasts will also be taken into account.
- In order to mitigate against spillages contaminating the surrounding surface water and hydrogeological environments, all oils, fuels, paints and other chemicals shall be stored in a secure bunded hardstand area in the construction compound. Refuelling and servicing of construction machinery will take place in a designated hardstand area which will be remote from any surface water inlets and outlets (where it is not possible to carry out such activities off site). Hydrocarbon spill kits will be available and to hand for refuelling crews in the event of any spills.
- Concrete batching will take place off site and wash out of concrete chutes will take place at designated locations in the site and the washout of truck drums will take place after back at the batching plant to minimise pollution release within the subject site.



- Discharge from any vehicle wheel wash areas will be directed to on-site settlement ponds for treatment prior to discharge to the local environment.
- Groundwater pumped from excavations is to be directed to on-site settlement ponds for treatment prior to discharge to the local environment.

### **Operational Phase**

The design of proposed site levels (roads, finished floor levels etc.) was completed to replicate existing surface contours, break lines etc., therefore replicating existing overland surface water flow paths, to minimise changes to the site characteristics and not concentrating water run-off in any particular location(s).

Surface water runoff from the site will be attenuated to the existing greenfield runoff rate as outlined in the Greater Dublin Strategic Drainage Study (GSDSDS). Surface water discharge rates will be controlled by 7 no. Hydrobrake type vortex flow control devices, located at all attenuation areas, in conjunction with attenuation storage in both locations.

The design of the proposed development incorporates the following SuDS surface water treatment train solutions:

- Permeable paving in driveway areas.
- Surface water runoff from roofs will be routed to the proposed surface water pipe network via the porous aggregates beneath permeable paved driveways.
- Surface water runoff from roads, where allowable, will drain to swales for treatment and runoff reduction.
- Attenuation of the 100-year return event storms with a 20% allowance for climate change.
- Installation of 7 No. flow control devices (Hydrobrake or similar) limiting surface water discharge from the site to greenfield runoff rates at the outfalls to the Fairyhouse stream and Broad Meadow River.
- Surface water discharge to pass via 7 No. Class 1 fuel / oil separator (sized in accordance with permitted discharge from the site).
- Non-Return Valve fitted at outlet locations to prevent any water from the Fairyhouse stream or the drainage ditch from draining back into the systems.

### **3.4.6. Monitoring**

Proposed monitoring in relation to the water and hydrogeological environment are as follows:

- Inspection and maintenance of fuel / oil separators.
- Inspection and maintenance of the internal road network for wear and tear that could cause silt release.
- Inspection and maintenance of attenuation and hydrobrake infrastructure.
- During the operational phase, an inspection and maintenance contract is to be implemented in relation to the proposed Class 1 fuel / oil separators, hydrobrakes and attenuation facilities.

### **3.5. Air Quality & Climate**

This chapter of the EIAR was completed by Ciara Nolan, a Senior Environmental Consultant in the air quality section of AWN Consulting Ltd. This chapter of the EIAR assesses the air quality and climate impacts associated with the proposed development at townlands of Baltrasna and Milltown, Ashbourne, County Meath.



### 3.5.1. Receiving Environment

In terms of the existing air quality environment, baseline monitoring data available from similar environments indicates that levels of nitrogen dioxide, particulate matter less than 10 microns and less than 2.5 microns are generally well below the National and European Union (EU) ambient air quality standards.

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Regulation 2018/842. The EPA state that Ireland had total ESR GHG emissions of 43.48 Mt CO<sub>2</sub>eq in 2021. This is 2.71 Mt CO<sub>2</sub>eq higher than Ireland's annual target for emissions in 2021. The EPA predict that Ireland can comply with the GHG targets for 2021 – 2030 provided full implementation of the measures outlined within the Climate Action Plan and the use of the flexibilities available.

### 3.5.2. Potential Impacts

Impacts to air quality and climate can occur during both the construction and operational phases of the proposed development. With regard to the construction stage the greatest potential for air quality impacts is from fugitive dust emissions impacting nearby sensitive receptors. Impacts to climate can occur as a result of vehicle and machinery emissions. In terms of the operational stage air quality and climate impacts will predominantly occur as a result of the change in traffic flows in the local areas associated with the proposed development.

There are a number of sensitive receptors in close proximity to the site at which dust impacts may occur. Provided the dust mitigation measures outlined in Appendix 7.1 of Chapter 7 are implemented, dust emissions are predicted to be short-term, negative and imperceptible and will not cause a nuisance at nearby sensitive receptors.

### 3.5.3. Mitigation Measures

The best practice dust mitigation measures that will be put in place during construction of the proposed development will ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health. Therefore, the impact of construction of the proposed development will be short-term, localised, negative and imperceptible with respect to human health.

Potential impacts to air quality and climate during the operational phase of the proposed development are as a result of a change in traffic flows and volumes on the local road network. The changes in traffic flows were assessed against the UK Design Manual for Roads and Bridges (DMRB) screening criteria for an air quality and climate assessment. The operational phase air quality and climate modelling assessments determined that there is no potential for significant impacts as a result of traffic related to the proposed development. It can therefore be determined that the impact to air quality and climate as a result of altered traffic volumes during the operational phase of the proposed development is negative, imperceptible and long-term. In addition, the proposed development has been designed to minimise the impact to climate where possible during operation.

As the National and EU standards for air quality are based on the protection of human health, and concentrations of pollutants in the operational stage of the proposed development are predicted to be significantly below these standards, the impact to human health is predicted to be imperceptible, negative and long term. No significant impacts to either air quality or climate are predicted during the construction or operational phases of the proposed development.



### 3.6. Noise & Vibration

This chapter of the EIAR was prepared by Donogh Casey (Acoustic Technician) of AWN Consulting who is currently a member of the Sound Insulation Testing Register, Ireland (SITRI) and has extensive experience in both building acoustic commissioning and environmental surveying. The chapter of the EIAR includes a description of the receiving ambient noise climate in the vicinity of the subject site and an assessment of the potential noise and vibration impact associated with the proposed development during both the short-term construction phase and the long-term operational phase on its surrounding environment.

#### 3.6.1. Methodology

The study has been undertaken using the following methodology:

- An environmental noise survey has been undertaken at the subject site in order to characterise the existing baseline noise environment;
- A review of the most applicable standards and guidelines has been conducted in order to set a range of acceptable noise and vibration criteria for the construction and operational phases of the proposed development;
- Predictive calculations have been performed during the construction phase of the project at the nearest sensitive locations to the development site;
- Predictive calculations have been performed to assess the potential impacts associated with the operation of the development at the most sensitive locations surrounding the development site;
- A schedule of mitigation measures has been proposed to reduce, where necessary, the identified potential outward impacts relating to noise and vibration from the proposed development; and
- An inward noise impact assessment from the existing noise sources on the proposed development.

#### 3.6.2. Potential Impacts

##### Construction Phase

##### Noise

The highest potential noise and vibration impact of the proposed development will occur during the construction phase due to the operation of various plant machinery used to construct the various phases in addition to Heavy Goods Vehicles (HGVs) movement to, from and around the site. However, impacts during this phase are short-term in duration.

The closest noise sensitive locations are described below.

- NSL 1** A number of residential houses in the Briars housing estate and Cherry close that boarder the proposed development to the East. Placed some 15-25m from the nearest significant site works;
- NSL 2** A number of residential houses in the Alderbrook estate that boarded the proposed development to the North. Placed some 15-20m from the nearest significant site works;
- NSL 3** A number of residential houses on Tara Close that boarded the proposed development to the West. Placed some 15-20m from the nearest significant site works;
- NSL 4** A residential house at the end of Hickey's lane, some 30m from the nearest significant site works, located to the west of site.

Review of the baseline noise survey and the Construction Noise Thresholds detailed in Section 8.2.1.1 indicates that the appropriate daytime CNTs for construction noise at residential properties are as follows:



- NSL 1: 65 dB  $L_{Aeq,1hr}$
- NSL 2: 65 dB  $L_{Aeq,1hr}$
- NSL 3: 65 dB  $L_{Aeq,1hr}$
- NSL 4: 65 dB  $L_{Aeq,1hr}$
- NSL 5: 65 dB  $L_{Aeq,1hr}$

It is assumed that construction works will take place during normal daytime working hours only.

At a distance of 15m from areas of major construction, representative of NSL1, NSL2 and NSL3 the predicted effect will be negative, significant to very significant and short-term impact associated with general construction at these nearest noise sensitive locations. These predicted effects are presented in the absence of mitigation measures.

At a distance of 30m from areas of major construction, the predicted effect will be negative, moderate to significant and short-term impact is predicted, in the absence of mitigation.

At a distance of 30m from areas of major construction, the predicted effect will be negative, moderate to significant and short-term impact is predicted, in the absence of mitigation.

At sensitive locations at distances of 60m and greater from construction works, the predicted effect will be negative, moderate and short term.

On review of the surroundings to the proposed development the nearest non-residential receptors were identified as being the Ashbourne Community centre - a significant impact is not predicted.

At greater distances predicted construction noise levels are lower, therefore any impact is expected to be negative, moderate and short-term.

### **Construction Traffic**

Estimated levels of construction traffic is considerably below the threshold value and therefore when compared to the base scenario, no significant increase in traffic noise levels is predicted to occur.

### **Vibration**

It is anticipated that excavations will be made using standard excavation machinery, which typically do not generate appreciable levels of vibration close to the source. Taking this into account and considering the distance that these properties are from the works and the attenuation of vibration levels over distance, the resultant vibration levels are expected to be well below a level that would cause disturbance to building occupants or even be perceptible.

Any construction activities undertaken on the site will be required to operate below the recommended vibration threshold set out in Table 8.4 of the chapter during all activities.

### **Operational Phase**

#### **Mechanical Plant**

Building and mechanical services plant items are proposed that will serve the apartments and ground floor retail / medical units.

The effect associated with building services plant, once designed to achieve the relevant noise criteria, is categorised as negative, imperceptible and long-term.



## Additional Traffic on Adjacent Roads

During the operational phase of the proposed development, there will be an increase in vehicular traffic associated with the site on some surrounding roads.

The predicted change in noise level associated with additional traffic on the existing road network, is negligible in magnitude. The impact is therefore imperceptible and long term.

## Creche

Considering the usage of the creche area (e.g. external areas are only expected to be in use for a portion of the 16 hour daytime period) and the standard noise insulation of the façade, it is predicted that the internal criteria will be met in these closest sensitive locations. This is also the case with reference to the second creche located in Block A1 and receptors further away, and therefore the resultant noise impact due to the creches is not significant.

## Inward Noise Assessment

Giving consideration to the noise levels presented in the previous sections, the initial site noise risk assessment has concluded that the level of risk across the site lies within the low to medium noise risk categories.

Maximum noise levels during the day did not typically exceed 75 – 78 dB  $L_{Amax}$ . It is therefore reasoned that it is unlikely that night-time maximum levels would be higher. The assessment spectrum for maximum noise levels is presented below.

External noise levels within the vast majority of communal open spaces across the development site are predicted to be within the recommended range of noise levels from ProPG of between 50 – 55 dB  $L_{Aeq,16hr}$ .

It is considered that the objectives of achieving suitable external noise levels is achieved within the overall site, therefore no further mitigation is required to control external noise levels across amenity areas.

### 3.6.3. Mitigation Measures

#### Construction Phase

##### Noise

- No plant used on site will be permitted to cause an ongoing public nuisance due to noise.
- The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the contract.
- Compressors will be attenuated models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use;
- Any plant, such as generators or pumps that is required to operate outside of normal permitted working hours will be surrounded by an acoustic enclosure or portable screen.
- Liaison Officer to be established
- Quiet plant to be selected
- Screening



## Vibration

Vibration from construction activities will be limited to the values set out in Section 8.2.2. of the EIAR/ Magnitudes of vibration slightly greater than those in the table are normally unlikely to cause cosmetic damage, but construction work creating such magnitudes should proceed with caution. Limit values have been provided for soundly constructed residential and commercial properties.

## Operational Phase

### Noise

During the operational phase of the development, noise mitigation measures with respect to the outward impact of traffic from the development are not deemed necessary.

Taking into account that sensitive receivers within the development are much closer than off-site sensitive receivers, once the relevant noise criteria is achieved within the development it is expected that there will be no negative impact at sensitive receivers off site, and therefore no further mitigation required.

The assessment has demonstrated that the recommended internal noise criteria can be achieved through consideration of the proposed façade elements at the design stage. The calculated glazing and ventilation specifications are preliminary and are intended to form the basis for noise mitigation at the detailed design stage. Consequently, these may be subject to change as the project progresses.

### Vibration

No vibration mitigation measures are required applicable the operational phase.

## 3.7. Material Assets: Built Services

This chapter of the EIAR has been prepared Brendan Manning BEng (Hons) CEng MIEI, who has over 10 years' experience in civil engineering and the construction industry. This chapter of the EIAR comprises of an assessment of the likely impacts of the proposed development on existing surface water, water supply, foul drainage, and utility services in the vicinity of the site, as well as identifying proposed mitigation measure to minimise any impacts.

### 3.7.1. Methodology

As part of assessing the likely impact of the proposed development, surface water runoff, foul drainage discharge and water usage calculations were carried out in accordance with the following guidelines:

- Greater Dublin Strategic Drainage Study (GDSDS).
- Method outlined in Irish Water's Code of Practice for Wastewater Infrastructure.
- Method outlined in Irish Water's Code of Practice for Water Infrastructure.

Assessment of the likely impact of the proposed development on existing material assets in the vicinity of the site included:

- Review of Irish Water utility plans (surface water drainage, foul drainage and water supply).
- Consultation with Irish Water and Meath County Council.
- Submission of a Pre-Connection Enquiry Application to Irish Water.
- Review of ESB Networks Utility Plans.
- Review of Gas Networks Ireland Service Plans.
- Review of Eircom E-Maps.





- Review of Virgin Media Maps.

### 3.7.2. Predicted Impacts

#### **Construction Phase**

The lands comprising the proposed development are in the ownership of the applicant. There are no known rights of way across the proposed development site. The office of Public Works (OPW) retains right of access for maintenance purposes along the Broad Meadow River and the Fairyhouse stream. Potential impacts that may arise during the construction phase include:

- Contamination of surface water runoff due to construction activities.
- Improper discharge of foul drainage from contractor's compound.
- Cross contamination of potable water supply to construction compound.
- Damage to existing underground and over-ground infrastructure and possible contamination of the existing systems with construction related materials.
- Diversion of existing ESB lines may lead to loss of connectivity to and / or interruption of supply from the electrical grid.
- Potential loss of connection and/or interruption to the Gas Networks Ireland; and
- Potential loss of connection and/or interruption to the Telecommunications infrastructure while carrying out works to provide service connections.

Without the consideration of mitigation measures the construction phase of the proposed development will likely have a neutral, short-term, moderate impact.

#### **Operational Phase**

Potential operational phase impacts on the water infrastructure are noted below:

- Increased impermeable surface area will reduce local ground water recharge.
- Accidental hydrocarbon leaks and subsequent discharge into piped surface water drainage network (e.g., along roads and in driveway areas).
- Increased maximum discharge to foul drainage network (Maximum Daily Foul Discharge Volume = 309m<sup>3</sup>).
- Increased potable water consumption (Average Day / Peak Week Demand = 281.4m<sup>3</sup> /351.8m<sup>3</sup>).
- Contamination of surface water runoff from foul sewer leaks.

Demand from the proposed development during the operational phase is not predicted to impact on the existing power, gas and telecoms network.

Without the consideration of mitigation measures the operational phase of the proposed development will likely have a neutral, permanent, slight impact.

### 3.7.3. Mitigation

#### **Construction Phase**

Please refer to Section 6.6 of the EIAR (Water & Hydrology) for mitigation measures associated with the surface water treatment.

Mitigation measures proposed in relation to the drainage and water infrastructure include the following:



- A site-specific Construction and Environmental Management Plan (CEMP) will be developed and implemented during the construction phase. Site inductions will include reference to the procedures and best practice as outlined in the CEMP.
- Surface water runoff from areas stripped of topsoil and surface water collected in excavations 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.
- The construction compound will include adequate staff welfare facilities including foul drainage and potable water supply. Foul drainage discharge from the construction compound will be tinkered off site to a licensed facility until a connection to the public foul drainage network has been established.
- The construction compound's potable water supply shall be located where it is protected from contamination by any construction activities or materials.

Relocation of existing ESB infrastructure will be fully coordinated with ESB Networks to ensure interruption to the existing power network is minimized (e.g. agreeing power outage to facilitate relocation of cables). Ducting and / or poles along proposed relocated routes (to be agreed with ESB) will be constructed and ready for rerouting of cables in advance of decommissioning of existing medium and high voltage power lines to minimize outage durations.

Similarly, relocation of overhead telecommunication lines running through the site will be coordinated with Eir to minimize interruption and ensure that all works are carried in a safe manner. As there are no gas networks running through the site relocation will not be necessary.

### **Operational Phase**

Please refer to Section 6.6 of the EIAR (Water & Hydrology) for mitigation measures associated with the surface water treatment.

All new foul drainage pipes will be pressure tested and will be subject to an internal CCTV survey in order to identify any possible defects prior to being made operational.

No additional mitigation measures are proposed in relation to water supply, however water conservation measures such as dual flush water cisterns and low flow taps will be included in the design.

On completion of the construction phase no further mitigation measures are proposed in relation to the electrical, gas and telecommunications infrastructure

## **3.8. Material Assets: Transportation**

This chapter of the EIAR has been prepared by Mark Kelly BAI, BA, MSc, PGradDip, CEng MIEI of DBFL Consulting Engineers, who has over 9 years' experience in traffic engineering and transportation planning, and Enrique Marenco Jimenez BSc MSc MIEI, of DBFL Consulting Engineers, with over 3 years' experience as a Traffic and Transportation Engineer.

This chapter of the EIAR assesses and evaluates the likely impact of the proposed development on the existing transportation system in the vicinity of the development site, as well as identifying proposed mitigation measures to minimise any identified impacts arising from the proposed development at Milltown, Ashbourne, County Meath.

### **3.8.1. Assessment Methodology**

The methodology incorporated a number of key inter-related stages, including:

- **Background Review:** This important exercise incorporated three parallel tasks which included (a) an



examination of the local regulatory and development management documentation; (b) an analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals across the Ashbourne Area, and (c) a review of planning applications to establish the legal status of various third party development schemes that were either considered within the strategic 'transport' studies or which have emerged and received full planning permission since.

- **Site Audit:** A site audit was undertaken to quantify existing road network characteristics and identify local infrastructure management arrangements, in addition to establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed as this stage of the assessment.
- **Traffic Counts:** Junction Turning Counts and Automatic Traffic Counts were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed residential development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed residential development.
- **Trip Distribution:** Based upon existing traffic characteristics and anticipated travel patterns of the proposed residential development, a trip distribution exercise has been undertaken to assign site generated trips across the local network.
- **Network Analysis:** Undertook detailed computer simulations to assess the operational performance of key junctions in the post development 2023 Opening Year, 2028 Interim Year and 2038 Design Year development scenarios in accordance with the NRA/TII document 'Traffic and Transport Assessment Guidelines' (2014).

### 3.8.2. Road Safety Review

With the objective of ascertaining the road safety record of the immediate routes leading to/from the subject site, the collision statistics as detailed on the Road Safety Authority's (RSA) website ([www.rsa.ie](http://www.rsa.ie)) have been examined. The RSA website includes basic information relating to reported collisions over the most recent twelve-year period from 2005 to 2016 inclusive. The RSA database records detail where collision events have been officially recorded such as when the Garda being present to formally record details of the incident. A cluster of 4 no. minor accidents can be noticed at the Dublin Road/Alderbrook Road/Deerpark junction. All collisions in the area are minor, and mostly affecting cars.

### 3.8.3. Network Analysis Conclusions

The modelling software TRANSYT, PICADY, and ARCADY was used in the assessment.

For **Junction 1** (Dublin Road/Cherry Lane), for the 2038 Do-Something scenario, the TRANSYT indicate that the junction will operate within capacity with a maximum queues of 7.46 pcu's is experienced along Arm B – Cherry Lane, with the highest DoS of 77% and a delay of 25.08 seconds during the AM peak whilst during the PM peak Arm A experiences a DoS of 89%, a queue of 31.74 pcu's and a delay of 31.72 seconds.

To conclude, the Dublin Road/Cherry Lane signalised junction will operate within capacity for all the peak hour scenarios for all the design years assessed. The highest DoS values recorded across the assessment are lower than 90% (0.90) threshold, which would indicate the junction is within capacity. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

For **Junction 2**, the PICADY results indicate that the Dublin Road R135 / Hickey's Lane three-arm priority-controlled junction will operate within capacity for all design years for the Do Something Scenarios. There is a maximum RFC value of 0.22 and a corresponding queue of 0.3 pcu's being recorded on the Hickey's Lane arm.



For the 2038 PM peak hour, results show a maximum RFC value of 0.19 occurring on the same arm, with a corresponding queue of 0.2 pcu's.

To conclude, the Dublin Road/Hickey's Lane priority-controlled junction will operate well within capacity for all the peak hour scenarios for all the design years assessed. The highest RFC recorded across the assessment is significantly lower than the 0.85 (85%) RFC threshold indicating a poorly performing junction. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

For **Junction 3**, the TRANSYT results indicate that the Dublin Rd/Alderbrook Rd/Deerpark four-arm signal-controlled junction will operate within capacity for all design years for the Do Something Scenarios. There is a maximum DoS occurring on Arm C Dublin Rd (N), with a value of 84%, a queue of 19.30 pcus and a delay of 33.95 seconds on the Straight & Left Turn stream. In the PM Peak, the maximum DoS equals to 88% on Arm A Dublin Rd (S) on the Straight and Left Turn stream, with a queue of 22.60 pcus and a delay of 34.81 seconds.

To conclude, the Dublin Rd/Alderbrook Rd/Deerpark will operate well within capacity for all the peak hour scenarios for all the design years assessed. The highest DOS recorded across the assessment is lower than the 90% DOS threshold indicating junction approaching capacity. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

For **Junction 5**, the PICADY results indicate that the Nine Mile Stone Roundabout will operate within capacity for all design years for the Do Something Scenarios. The maximum RFC occurs in 2038 AM peak on Arm 4 R135 (N), with a value of 60%, a queue of 1.50 pcus, and a delay of 5.70 seconds. In 2038 PM peak, the maximum RFC occurs on Arm 2 M2 Access, and equals to 62%, with queue of 1.60 pcus, and a delay of 4.71 seconds.

To conclude, the Nine Mile Stone Roundabout will operate well within capacity for all the peak hour scenarios for all the design years assessed. The highest RFC recorded across the assessment is lower than the 0.85 (85%) RFC threshold indicating a poorly performing junction. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

### Sensitivity Analysis

**Junction 1** (Dublin Road/Cherry Lane) operates within capacity (DoS < 90%) for the 2038 Do-Something scenario. The TRANSYT results indicate that maximum queues of 26.28 pcus are experienced along Arm C – Dublin Rd (N), with the highest DoS of 87% and a delay of 37.54 seconds during the AM peak whilst during the PM peak Arm A experiences a DoS of 94%, a queue of 13.50 pcus and a delay of 42.71 seconds.

The Dublin Road/Cherry Lane signalised junction will operate within capacity for the AM peak scenarios, whilst the PM peak shows an oversaturated performance on one arm. The highest DoS recorded across the AM Peak assessment occurred for the 2038 Do Something is lower than the 90% threshold, which means that the operation is within capacity. However, the DOS in the PM is slightly over 90%, which indicates that the junction would be approaching capacity. This assessment analyses junction operation during the AM and PM peak hours, so it represents a worst case scenario.

For **Junction 2**, the PICADY results indicate that the Dublin Road R135 / Hickey's Lane three-arm priority-controlled junction will operate within capacity for all design years for the Do Something Scenarios. The junction will operate within capacity in the 2038 AM peak hour with a maximum RFC value of 23% and a corresponding queue of 0.3 pcus being recorded on the Hickey's Lane arm, and delay of 14.08 seconds, and in the PM peak hour, with an RFC value of 20% occurring on the same arm, with a corresponding queue of 0.2 pcus, and a delay of 14.84 seconds.

To conclude, the Dublin Road/Hickey's Lane priority-controlled junction will operate well within capacity for all the peak hour scenarios for all the design years assessed. The highest RFC recorded across the assessment occurred for the 2038 Do Something PM peak hour with an RFC significantly lower than the 0.85 (85%) RFC threshold indicating a poorly performing junction. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

For **Junction 3**, the TRANSYT results indicate that the Dublin Rd/Alderbrook Rd/Deerpark four-arm signal-controlled junction will operate within capacity for all design years for the DS 2038 + Potential Future



Development. The highest DOS occurs on Arm C – Dublin Rd (N), on the Straight and Left Turn stream, with a value of 85%, and queue of 19.96 pcus, and a delay of 35.11 seconds. In the PM peak, the highest DOS occurs on Arm A – Dublin Rd (S), on the Straight and Left Turn, with a DOS of 90%, a queue of 24.19 pcus, and a delay of 37.83 seconds.

To conclude, the Dublin Rd/Alderbrook Rd/Deerpark will operate well within capacity for the peak hours in 2038 with the Potential Future Development. The highest DOS recorded across the assessment is lower than the 90% DOS threshold indicating junction approaching capacity. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

For **Junction 5**, the PICADY results indicate that the Nine Mile Stone Roundabout will operate within capacity for 2038 with the Potential Future Development for the Do Something Scenarios. The highest RFC occurs on Arm 4 – R135 (N), with a value of 65%, and queue of 1.80 pcus, and a delay of 6.38 seconds. In the PM peak, the highest DOS occurs on Arm 2 – M2 Access, with an RFC of 64%, a queue of 1.80 pcus, and a delay of 5.07 seconds.

To conclude, the Nine Mile Stone Roundabout will operate well within capacity for all the peak hour scenarios for all the design years assessed. The highest RFC recorded across the assessment is lower than the 0.85 (85%) RFC threshold indicating a poorly performing junction. As the above assessment analyses junction operation during the AM and PM peak hours, it represents a worst case scenario.

### 3.8.4. Mitigation Measures

#### Construction Phase

A Construction and Environmental Management Plan (CEMP) has been prepared as part of the planning application with an associated Preliminary Construction Management Plan (PCMP) which incorporates a range of integrated control measures and associated management activities with the objective of minimising the construction activities associated with the development. The following initiatives will be implemented to avoid, minimise and/or mitigate against the anticipated construction period impacts:

- During the pre-construction phase, the site will be securely fenced off/hoarded off from adjacent properties, public footpaths and roads;
- Appropriate on-site parking (temporary parking for the duration of construction works) and compound area will be provided to prevent overflow onto the local network;
- A large proportion of construction workers are anticipated to arrive in shared transport. It is likely that some numbers of the construction team will be brought to/from the site in vans/minibuses, which will serve to reduce the trip generation potential;
- Delivery vehicles to and from the site will be spread across the course of the working day, therefore, the number of HGVs travelling during the peak hours will be relatively low;
- Truck wheel washes will be installed at construction entrances;
- Any specific recommendations with regard to construction traffic management made by Meath County Council will be adhered to;
- Potential localised traffic disruptions during the construction phase will be mitigated through the implementation of industry standard traffic management measures such as the use of traffic signage. These traffic management measures shall be designed and implemented in accordance with the Department of Transport's Traffic Signs Manual "Chapter 8 Temporary Traffic Measures and Signs for Roadworks" and "Guidance for the Control and Management of Traffic at Roads Works – 2nd Edition" (2010); and
- Site entrance point/s from the public road will be constructed with a bound, durable surface capable of



withstanding heavy loads and with a sealed joint between the access and public highway. This durable bound surface will be constructed for a distance of 10m from the public road.

- Material storage zones will be established in the compound area and will include material recycling areas and facilities;
- 'Way finding' signage will be provided to route staff / deliveries into the site and to designated compound / construction areas;
- Dedicated construction haul routes will be identified and agreed with Meath County Council prior to commencement of activities on-site; and
- On completion of the works, all construction materials, debris, temporary hardstands etc. from the site compound will be removed off-site and the site compound area reinstated in full on completion of the works.

The projected increase in vehicle traffic during the operational stage may lead to a slight increase in noise levels during peak trip generation periods, however, implementation of the mitigation measures described in the Noise & Vibration and Air Quality & Climate chapters of the EIAR will prevent and minimize the potential impacts of this interaction.

### **Operational Phase**

A package of integrated mitigation measures has been identified to off-set the additional local demand that the proposed residential development at the subject site could potentially generate as a result of the forecast increase in vehicle movements by residents of the scheme. The identified measures and associated timescale for their implementation are summarised below.

- **Parking Strategy** - A management regime has been set out in Chapter 5 of the Traffic and Transport Assessment (and accompanies this planning application) which will be implemented by the development's management company to control access to the on-site car parking spaces thereby actively managing the availability of on-site car parking for residents and visitors to the development. This provision equates to a car parking ratio of approximately 1.35 car parking spaces per apartment/duplex unit. The signing of a rental agreement or purchase of one of the proposed residential apartments will NOT include access to a designated on-site parking space. All potential residents (prior to signing rental agreement) will be notified that the proposed scheme is a 'low car allocation' development with no access (or guarantee thereof) to the limited on-site residents car parking provision. Nevertheless, all residents of the proposed residential apartment scheme will have the opportunity to apply to the on-site management company for a resident's car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement car parking space. A charge will be applied to obtain a permit with the objective of covering the associated management costs and discouraging long term usage of the car parking space.
- **Management** – A preliminary Mobility Management Plan (MMP) has been compiled with the aim of guiding the delivery and management of co-ordinated initiatives by the scheme promotor to be implemented upon occupation of the site. The MMP will ultimately seek to encourage sustainable travel practices for all journeys to and from the proposed development.
- **Infrastructure** – Infrastructure measures identified to reduce reliance of private vehicles include the provision of ample secure cycle parking on site, exceeding minimum guidance (DHPLG), and ensuring a design which promotes permeability for pedestrians and cyclists to, through and from the development.
- **Infrastructure** – Junction enhancement have been identified and proposed at the Cherry Lane site access junction, including pedestrian and cycle facilities, with the objective of creating a highly permeable environment for pedestrians and cyclists.



- **Car Sharing** – The provision of 2 No. dedicated car share (GoCar and development-owned) spaces at the Development for the use of the scheme's residents and staff. The availability of these on-site provide a viable alternative to residents needing to own a private vehicle whilst still having access to a car as and when required. GoCar have provided a letter of intent to provided 2no. car share facilities for use by future residents of the proposed development. GoCar support letter can be found in the Appendices of TTA report which is included in this planning application package and should be read in conjunction with this report.

### 3.9. Material Assets: Resource and Waste Management

This chapter of the EIAR was completed by Niamh Kelly and Chonail Bradley of AWN Consulting Ltd. An assessment of the potential impacts associated with waste management during the construction and operational phases of the proposed development was carried out.

#### 3.9.1. Receiving Environment

The receiving environment is largely defined by Meath County Council as the local authority responsible for setting and administering waste management activities in the area through regional and development zone specific policies and regulations.

#### 3.9.2. Construction Phase

During the construction phase, typical Construction & Demolition (C&D) waste materials will be generated which will be source segregated on-site into appropriate skips/containers, where practical and removed from site by suitably permitted waste contractors to authorised waste facilities. Where possible, materials will be reused on-site to minimise raw material consumption. Source segregation of waste materials will improve the re-use opportunities of recyclable materials off-site. Completion of the basement and construction of new foundations and the installation of underground services will require the excavation of between c.75,000m<sup>3</sup> of material, it is anticipated that 60,000m<sup>3</sup> of this excavated material will be able to be reused onsite. The remaining balance of excavated materials, which is either unsuitable for use as fill, or not required for use as fill, will be exported off site. Excavated material which is to be taken offsite will be taken for offsite reuse, recovery, recycling and/or disposal.

A carefully planned approach to waste management and adherence to the site-specific Resource and Waste Management Plan (Appendix 11.1 of the chapter) during the construction phase will ensure that the effect on the environment will be short-term, neutral and imperceptible.

#### 3.9.3. Operational Phase

During the operation phase, waste will be generated from the residents as well as the commercial tenants. Dedicated communal and individual waste storage areas have been allocated throughout the development for residents. The residential waste storage areas have been appropriately sized to accommodate the estimated waste arisings in both apartments and shared residential areas. The commercial tenants have their own shared commercial WSAs allocated, separate from residential WSAs. The waste storage areas have been allocated to ensure a convenient and efficient management strategy with source segregation a priority. Waste will be collected from the designated waste collection areas by permitted waste contractors and removed off-site for re-use, recycling, recovery and/or disposal.

An Operational Waste Management Plan has been prepared which provides a strategy for segregation (at source), storage and collection of wastes generated within the development during the operational phase including dry mixed recyclables, organic waste, mixed non-recyclable waste and glass as well as providing a

strategy for management of waste batteries, WEEE, printer/toner cartridges, chemicals, textiles, waste cooking oil, furniture and abandoned bicycles (Appendix 11.2 of the chapter). The Plan complies with all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development.

### 3.9.4. Mitigation

Provided the mitigation measures outlined in Chapter 11 are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted effect of the operational phase on the environment will be long-term, neutral and imperceptible.

### 3.10. Cultural Heritage (Archaeological & Architectural)

This chapter of the EIAR has been prepared by Jordan Hanson, BA, MA of Archaeology Plan and assesses the potential environmental effects on cultural heritage resulting from a strategic housing development in Ashbourne, Co. Meath.

#### 3.10.1. Receiving Environment

The planning boundary of the proposed development comprises a collection of elevation fields of farmland, altogether forming a sub-rectangular footprint. A twelfth field (Field 11) was included in the initial assessment for the site but does not form part of the current proposed development. This field has an in situ residence, while three other residences occupy the northern border of the Study Area along Cherry Lane in Fields 2 and 3.



The Baltrasna-Milltown parish and townland boundary bisects the northern two-thirds of the Study Area and runs east-west. The lands north of this boundary are situated within the Milltown townland, and include Fields 1, 2, and 3. The lands to the south lie within the Baltrasna townland, and include Fields 4, 5, 6, 7, 8, 9, 10, 11, and 12.

The townland of Killeglad is situated to the immediate west of the planning boundary. The proposed development's western border is marked by a contiguous north-south running boundary, comprised of the Killeglad-Milltown parish and townland boundary in the north, and the Killeglad-Baltrasna parish and townland boundary in the south.



### 3.10.2. Potential Impact of the Proposed Development

#### Archaeological Heritage

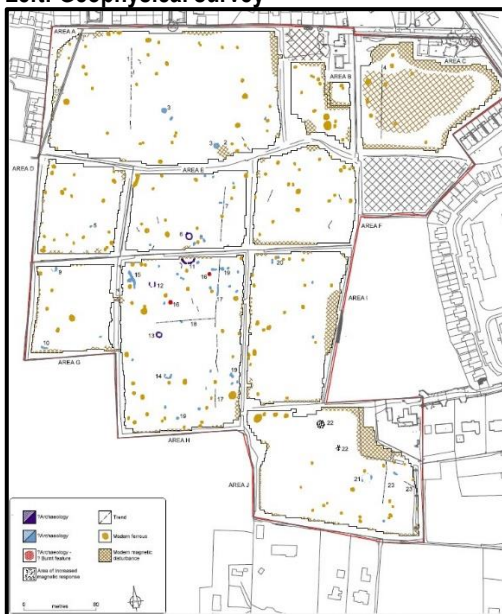
The proposed development would result in a neutral effect (no effect) on any sites and monuments recorded on the Record of Monuments and Places (RMP). However, the close proximity of the planning boundary to a known Recorded Monument (ME45-067 Ringfort) was identified, which was surmised to enhance the archaeological potential of the planning boundary.

The proposed development would result in a permanent profound negative effect on any archaeological features and deposits situated within the planning boundary, without appropriate mitigation measures.

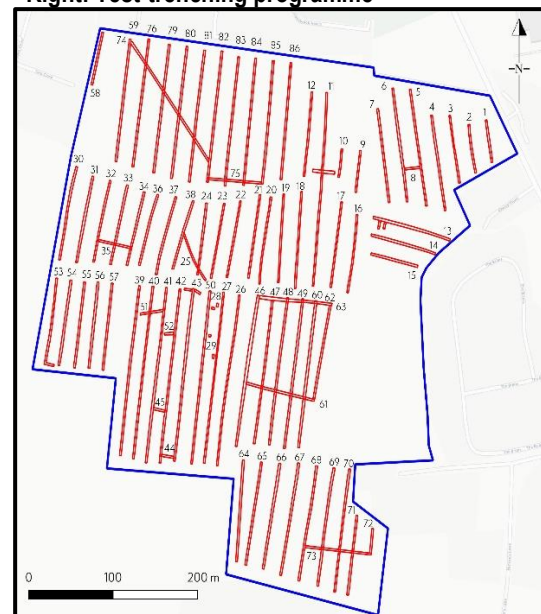
A geophysical survey of the planning boundary carried out by Leigh in 2022 identified a number of potential archaeological features, informed by geophysical responses and signatures.

A test-trenching programme was carried out within the planning boundary in August 2022. This programme was informed by Leigh's geophysical data, with test trenches situated in areas of suggested archaeological potential. The test-trenching programme confirmed the presence of archaeological features in several fields of the planning boundary, with significant archaeological features identified generally in the south-western areas.

**Left: Geophysical survey**



**Right: Test-trenching programme**



#### Architectural Heritage

The proposed development would result in a neutral effect (no effect) on architectural heritage. No architectural heritage structures are situated within the planning boundary, such as those listed on the Record of Protected Structures (RPS), National Inventory of Architectural Heritage (NIAH), or Meath Industrial Heritage Survey (MIHS).

### 3.10.3. Mitigation Measures

#### Archaeological Heritage

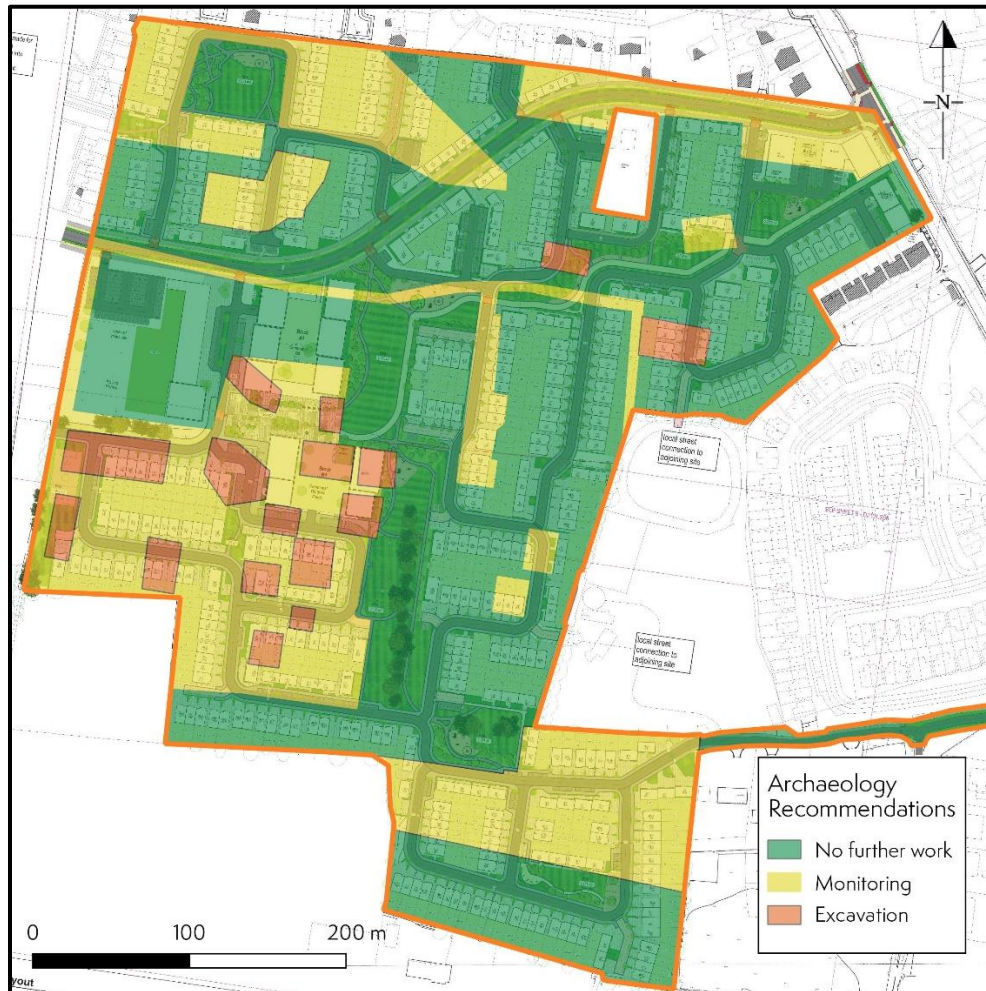
Mitigation measures for archaeological heritage can be seen on the visual aid below.

- Areas shaded in orange, if due to be impacted upon by any development, should be archaeologically stripped of topsoil and fully excavated under licence from the National Monuments Service prior to any groundworks.



- The topsoil stripping of the areas shaded in yellow, if due to be impacted upon by any development, should be monitored under archaeological supervision under licence from the National Monuments Service. Should any archaeological remains be identified, these should be fully excavated in advance of groundworks.
- The dwellings to the south of Cherry Lane, the lane itself and the farmyard at the eastern end of the lane are included in the areas to be monitored. The farmyard at the eastern end of Hickey's Lane to the south has also been included. It is unknown what the potential for archaeology is in these areas at present. These areas may require limited or intermittent monitoring during the removal of the upstanding buildings and the insertion of services.
- The townland boundary between Baltrasna and Milltown, which also forms the parish boundary between Ratoath and Donaghmore appears to follow the route of a watercourse used since prehistory. Five sections should be excavated through this ditch to further assess whether there is any survival of earlier versions of the ditch elsewhere within the planning boundary. A strip 5m in width on either side of the ditch should be monitored under archaeological supervision to assess for additional prehistoric remains along the line of the ditch. The western side of the planning boundary is bounded by the ditch forming the townland boundary between Milltown, Baltrasna, and Killegland. The parish boundary between Killegland and Ratoath also follows this ditch. The places where the Proposed Development impacts on this ditch should be monitored under archaeological supervision. Two sections should be recorded across the ditch.
- Those areas shaded in green require no further archaeological works.
- Greenspaces within the development have been shaded in green, indicating that they should require no further archaeological works. It is recommended that these areas be fenced or cordoned off prior to and during groundworks within the planning boundary. By enclosing these areas prior to and during groundworks, there can be no impact on archaeology situated there. This mitigation strategy is only valid should no ground level reduction take place within the greenspace areas. If ground level reduction is required within the areas prior to the creation of greenspaces, archaeological monitoring may be required.

**Bottom: Recommended Mitigation Measures for Archaeological Heritage within the planning boundary.**



### Architectural Heritage

No mitigation measures are applicable, as it is anticipated that there would be a neutral effect (no effect) on architectural heritage.

### **3.11. The Landscape**

This chapter of the EIAR was carried out by chartered landscape architect Ronan Finnegan, BSc, PG Dip, CMLI of Cunnane Stratton Reynolds. Oversight of the chapter was provided by Lucy Carey, MILI, Director of Cunnane Stratton Reynolds.

#### **3.11.1. Methodology**

The chapter was informed by a desktop study and a survey of the site and receiving environment in October 2021. The assessment is in accordance with the methodology prescribed in the Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (GLVIA) published by the UK Landscape Institute and the Institute for Environmental Management and Assessment and the relevant updates and Clarifications as issued by the Landscape Institute.



### 3.11.2. Predicted Landscape Impacts

#### Construction Phase

Construction phase will be programmed over a number of years resulting in ongoing infrastructure, building and related works for some period of time. These are generally destructive and visually adverse in nature.

The landscape sensitivity is described in Section 1.2 above i.e. *Medium*. The magnitude of change is described below and at construction phase would also affect the wider landscape setting. Change, involves the development of fields for an urban development of scale. Therefore the magnitude of change is Medium.

The significance of this change is Moderate.

Qualitatively this change would be Neutral ... *Scheme complements the scale, landform and pattern of the landscape(townscape)/view and maintains landscape quality*, in the Construction Stage or Temporarily.

#### Operational Phase

The sites '*Enhancement Values*' reflect a significant body of policy that is supportive of major landscape change at this location to a new residential community. The site currently presents an urban-rural fringe with development potential through appropriate design.

The sites '*Conservation Values*' predominantly reflect the distinctive enclosed mature field boundaries across most of the Site. These tree lines and hedgerows can contribute to the evolving urban landscape across the Site and to the relationship with the eastern entrances connecting to the R152 Dublin Road.

The '*Impact*' of the development is the change of the site from farmland with some derelict properties, to a new residential area of scale on the southeastern end of Ashbourne town. Whilst some trees and hedgerows will be affected, the new development has been laid out to incorporate existing landscape features where feasible. The proposed development has been prepared in accordance with best practice urban design guidelines. The '*Effects*' of this in terms of alteration of the landscape character are assessed below.

Landscape '*Sensitivity*' is Medium – *Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong or has evidence of alteration to / degradation / erosion of elements and characteristics. The character of the landscape is such that there is some capacity for change in the form of development. These areas may be recognised in landscape policy at local or county level and the principle management objective may be to consolidate landscape character or facilitate appropriate, necessary change.*

The '*Magnitude of Change*' is Medium – *Change that is moderate in extent, resulting in partial loss or alteration to key elements features or characteristics of the landscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape.*

(This reflects the Development Plan zoning, which has determined the acceptability of this land for residential and community use)

The effect is of Moderate Significance .

Qualitatively the landscape effect is Neutral - *Scheme complements the scale, landform and pattern of the landscape(townscape)/view and maintains landscape quality*;

This recognises that, whilst the change in character from farmland to urban is important, it reflects land use policy for the site and has been applied to the site as per the best practice in terms of urban design, open



space development and Green Infrastructure policy i.e. the change is from farmland with derelict properties to a quality urban townscape on the southeastern fringes of Ashbourne town.

This effect would be Permanent.

### 3.11.3. Mitigation and Enhancement

#### Construction Phase

The landscape proposals for the proposed development site include retaining existing landscape features wherever possible including areas of scrub, hedgerows, trees and drainage ditches.

The works around the existing vegetation to be cleared and retained will be supervised by the clerk of works ecologist and project arborist. Protection measures will be outlined in the Environmental Management Plan which will help protect these features. Retained trees and hedgerows will be protected by installation of fencing in accordance with *BS5837:2012: Trees in Relation to Construction* around the root protection areas (RPAs) as per the arborists Arboricultural Impact Assessment (AIA) report. Areas of soil outside the main site works will be fenced off to prevent compaction. Where the soil will be disturbed by the site works it will be removed and stored elsewhere on site and reused across the Proposed Development for landscaping including use as a seedbank for wildflowers.

Visual impacts will be mitigated through the appropriate site management measures and work practices to ensure the site is kept tidy, dust is kept to a minimum, and that public areas are kept free from building material and site rubbish. Works will be carried at agreed hours with the council.

Site hoarding will be appropriately scaled, finished and maintained for the period of construction of each section of the works as appropriate. Similarly, other structures including the site compound and scaffolding will be temporary in nature and contained with the works area.

#### Operational Phase

The retained landscape features will be incorporated into the overall landscape proposal which will bolster the existing green and blue infrastructure of the existing proposed development site and immediate surroundings.

An existing line of mature ash trees within the southern part of the Proposed Development site will be incorporated as a key feature within the new neighbourhood park. The various public open spaces will include valuable functioning SUD features.

Planting across the proposed development will include trees, hedges, shrubs, wildflower meadow, amenity/private grassland. The planting will consist of a range of suitable native and non-native non-invasive species which across the various open spaces and gardens will help to soften the appearance of the buildings and act as a visual barrier to reduce potential visual impacts.

The existing retained hedgerows along the perimeter of the proposed site acts an importance physical and visual barrier to the surrounding areas of housing and farmland. Tree lines are proposed across the proposed development to add structure and act as vertical screens. The retained and enhanced hedgerows and new planting will help to connect with the existing landscape features within the surroundings and strength the green infrastructure.

Habitat housing will include the placement of log piles (created from felled trees within the proposed development site), bird and bat boxes at locations through the Proposed Development as determined by the ecologist clerk of works.

Pathways are designed to allow good legibility for all abilities users across the Proposed Development and to



directly connect onto the R135 Dublin Road providing access into Ashbourne town. Pedestrian access is provided onto the existing residential area to the west with access points designed to allow for future potential access points into the zoned development lands directly to the west of the Site.

The lighting across the proposed development will be designed to prevent light spillage pollution into the surrounding urban and rural areas.



## 4.0. Identification of Significant Impacts / Interactions

Chapter 14 of the EIAR (Volume II) provides detail on the interaction and interdependencies in the existing environment. Armstrong Fenton Associates Planning and Development Consultants, in preparing and co-ordinating this EIAR, ensured that each of the specialist consultants liaised with each other and dealt with the likely interactions between effects predicted as a result of the proposed development during the preparation of the proposals for the subject site and this ensures that mitigation measures are incorporated into the design process.

This approach is considered to meet with the requirements of Part X of the Planning and Development Act 2000, as amended, and Part 10, and schedules 5, 6 and 7 of the Planning and Development Regulations 2001-2018. The detail in relation to interactions between environmental factors is covered in each chapter of the EIAR.

All environmental factors are interlinked to a degree such that interrelationships exist on numerous levels. Interactions within the study area can be one-way interactions, two-way interactions and multiple-phase interactions which can be influenced by the proposed development. As this EIAR document has been prepared by a number of specialist consultants, an important aspect of the EIA process is to ensure that interactions between the various disciplines have been taken into consideration. This chapter of the EIAR was prepared by Tracy Armstrong BA, MRUP, MIPI, MRTPI, Managing Director of Armstrong Fenton Associates Planning and Development Consultants.

All of the potential significant effects of the proposed development and the measures proposed to mitigate them have been outlined in the preceding chapters of this EIAR. However, for any development with the potential for significant environmental effects, there is also the potential for interaction amongst these potential significant effects. The result of interactive effects may exacerbate the magnitude of the effects or ameliorate them, or have a neutral effect.

The purpose of this requirement of an EIAR is to draw attention to significant interaction and interrelationships in the existing environment. Armstrong Fenton Associates Planning and Development Consultants, in preparing and co-ordinating this EIAR ensured that each of the specialist consultants liaised with each other and dealt with the likely interactions between effects predicted as a result of the proposed development during the preparation of the proposals for the subject and ensuring that appropriate mitigation measures are incorporated into the design process.

Having regard to the approach taken, the aspects of the environment likely to be significantly affected by the proposed development, during both the construction and operational phases, have been considered in detail in the relevant Chapters of this EIAR document. In addition, likely interactions between one topic and another have been discussed, where relevant, by the relevant specialist consultant(s).

The primary interactions can be summarised as follows:

- Population and Human Health, Air Quality & Climate, Noise & Vibration, Transportation and Resource & Waste Management
- Biodiversity, Lands, Soils & Geology, Water & Hydrology, Noise & Vibration and Resource & Waste Management
- Lands, Soils & Geology, Water & Hydrology, Biodiversity, Air Quality & Climate, Noise & Vibration, Transportation and Resource & Waste Management
- Water & Hydrology, Lands, Soils & Geology, Biodiversity, Air Quality & Climate, Noise & Vibration, Transportation and Resource & Waste Management
- Air Quality & Climate, Population and Human Health, Water & Hydrology and Transportation
- Noise & Vibration and Population and Human Health,
- Built Services, Biodiversity, Lands, Soils & Geology, Water & Hydrology, Air Quality & Climate, Noise & Vibration and Transportation



- Transportation, Population and Human Health, Water & Hydrology, Lands, Soils & Geology, Air Quality & Climate and Noise & Vibration
- Cultural Heritage, Lands, Soils & Geology and Built Services
- The Landscape Biodiversity, Lands, Soils & Geology and Transportation
- Resource & Waste Management, Population and Human Health, Lands, Soils & Geology, and Transportation

The relevant consultants liaised with each other and the project architects, engineers and landscape architects where necessary to review the proposed scheme and incorporate suitable mitigation measures where necessary. As demonstrated throughout this EIAR, most inter-relationships are neutral in impact when the mitigation measures proposed are incorporated into the design, construction or operation of the proposed development.

#### 4.1. Other Impacts

##### 4.1.1. Direct and Indirect Effects Resulting from the Use of Natural Resources

Schedule 6 Item 2 (c) of the Planning and Development Regulations, 2001 - 2015 requires that an EIAR contains a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from the use of natural resources. No likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative) of the proposed development on the environment are expected to arise from the use of natural resources.

##### 4.1.2. Direct and Indirect Effects Resulting from Emission of Pollutants, Creation of Nuisances and Elimination of Waste

Schedule 6 Item 2 (c) of the Planning and Development Regulations, 2001 - 2015 requires that an EIAR contains a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from the emission of pollutants, the creation of nuisances and the elimination of waste. No likely significant effects on the environment are expected to arise from the emission of pollutants, the creation of nuisances or the elimination of waste.

#### 4.2. Residual Impacts and Cumulative Impacts

Residual impacts can be defined as the final impacts that occur after proposed mitigation measures have taken effect. Many of the findings of the EIA have been incorporated into the design of the development and have contributed to the reduction or amelioration of potential impacts. Where residual impacts arise, they are detailed in the relevant chapters and further mitigation measures detailed where necessary.

Cumulative impacts are defined as: *“The addition of many small impacts to create one larger, more significant, impact”* (EPA 2002). Cumulatively, these impacts may be significant if they occur close together in terms of location and time. The cumulative impact of the proposed development is categorised as neutral and moderate.

As outlined in Chapter 2 the EIAR, where relevant, the EIAR also takes account of other development(s) within the area. The proposed development has the potential for cumulative, secondary and indirect impacts particularly with respect to such topics as traffic which in many instances are often difficult to quantify due to complex inter-relationships. However, all cumulative, secondary and indirect impacts are unlikely to be significant and, where appropriate, have been fully addressed in the relevant specialist chapters of this EIAR.

To determine traffic impacts in Chapter 10, the traffic generated by the proposed development is combined with the baseline traffic generated by the traffic on the road network in the area. The potential traffic impacts from





other developments were also considered in the assessment (e.g. residential developments - adjacent to the site to the south and east).

Each of the relevant specialists has considered the potential for cumulative impact in preparing their assessments. While there is the potential for negative impacts to occur during the construction stage of the scheme, with the implementation of the appropriate mitigation outlined in the EIAR, the residual cumulative impact is not considered to be significant.

#### **4.3. Environmental Commitments and Mitigation Measures**

Mitigation measures to be adopted during the construction and operational phases of the proposed development are detailed within each chapter. These measures should be implemented through planning conditions imposed by the Planning Authority / An Bord Pleanála.

Mitigation measures will be managed by the contractor(s) as part of a Management Plan and by the developer/landowners thereafter.

#### **4.4. Conclusion**

The EIAR (Volume II) has regard to and builds on the environmental assessments prepared during the preparation and adoption of the Meath County Development Plan 2021-2027.

The EIAR has considered the likely, significant, adverse effects of the proposed project on the receiving environment.

Mitigation measures are included, to avoid and / or reduce impacts on the environment where considered necessary. This includes mitigation measures incorporated into the design of the proposed development.

The EIAR concludes that there are no material or significant environmental issues arising which were not anticipated by the Meath County Development Plan 2012-2027 and considered in its Strategic Environmental Assessments.

#### **5.0. Summary of EIA Mitigation and Monitoring Measures**

Chapter 15 of the EIAR (Volume II) provides a summary of all the mitigation and monitoring measures proposed throughout the EIAR document for ease of reference for the Planning Authority and all other interested parties.

