EIAR

Volume 1 – Non Technical Summary

Proposed Residential Development

Lands at Cornamaddy, Athlone, Co. Westmeath

On behalf of Marina Quarter Limited

October 2023





Planning & Development Consultants 63 York Road, Dun Laoghaire Co. Dublin www.brockmcclure.ie

Table of Contents

| 1. | Introduction2 |
|-----|--------------------------------------------------------|
| 2. | Introduction |
| 3. | Planning and Development Context |
| 4. | Alternatives |
| 5. | Population and Human Health12 |
| 6. | Land, Soils and Geology14 |
| 7. | Hydrology16 |
| 8. | Biodiversity18 |
| 9. | Air Quality and Climate20 |
| 10. | Noise and Vibration23 |
| 11. | Landscape Visual Impact Assessment25 |
| 12. | Architectural, Archaeological and Cultural Heritage 28 |
| 13. | Traffic and Transportation30 |
| 14. | Waste Management31 |
| 15. | Material Assets33 |
| 16. | Cumulative Impacts34 |
| 17. | Interrelationships Between the Aspects |

INTRODUCTION

Overview of Site

This Environmental Impact Assessment Report (EIAR) is submitted in conjunction with, and in addition to, a planning application prepared by Brock McClure Planning and Development Consultants, 63 York Road, Dun Laoghaire, Co. Dublin for a development at this site of total c. 7.31ha on lands located at Conrmaddy, Athlone, Co. Westmeath.

We wish to highlight from the outset, that our client is committed to working with the Planning Authority to deliver on a residential proposal that is appropriate to the site and the surrounding context at Cornamaddy. The residential scheme is designed in line with the pattern of the surrounding residential development and the current market demand for the wider Athlone area. The site masterplan is shown on figure 1 below:



Figure 1: Site Masterplan Layout

The development will comprise of a residential development and public open space comprising the following:

Construction of 177 no. residential units on a gross site area of 7.31 ha ranging in height from 2-3 storeys comprising detached, semi-detached, and terraced houses, maisonettes and 3 storey duplex apartments. 65 no. 2 bed houses, 71 no. 3 bed houses and 9 no. 4 bed houses will be provided. 24 no. 1 bed maisonette apartment units and 8 no. 3 storey duplex apartment units will be provided.

Content of Environmental Impact Assessment Report

This EIA report has been prepared in accordance with the most relevant guidance including but not limited to:

- EIA Directive (2011/92/EU) as amended by EIA Directive (2014/52/EU)
- Planning and Development Act 2000 (as amended)
- Planning and Development Regulations 2001 (as amended)
- Guidelines for Planning Authorities and An Bord Pleanala on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, 2018).

- Guidance on preparation of the Environmental Impact Assessment Report (European Union, 2017)
- Guidelines on the Information to be contained in Environmental impact Assessment Reports (EPA, 2022).

Pursuant to EIA Directive, (Article (5) 1 of Directive 2014/52/EU), this EIAR specifically contains:

- A description of the project comprising information on the site, design, size and other relevant features of the project;
- A description of the likely significant effects of the project on the environment;
- A description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and if possible, offset likely significant adverse effects on the environment;
- A description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.
- A description of the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be effected or the use of natural resources;
- A non-technical summary of the information referred to in points (a) to (d); and
- Any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project.

Impacts arising from the existence of the proposed development, the use of natural resources, the emission of pollutants, the creation of nuisances and the elimination of waste are described as direct, indirect, secondary, cumulative, short and long term, permanent and temporary, positive and negative, as appropriate.

Competency and Project Team

An Environmental Impact Assessment Report must be prepared by competent experts. The applicant, Marina Quarter Limited approached Brock McClure Planning and Development Consultants to direct and co-ordinate the preparation of the EIAR. A team of qualified experts has prepared each individual chapter of the report. Contributing consultants to this EIAR are as follows:

- Brock McClure Planning and Development Consultants
- Doran Cray Architects
- Paul McGrail Consulting Engineers
- Cunnane Stratton Reynolds Land Planning and Design
- John Cronin & Associates Archaeology
- Enviroguide Consulting
- Enfonic Limited
- JBA Consulting

Structure of Environmental Impact Assessment Report

The EIAR is presented in 3 no. volumes as follows:

- Volume 1 Non-Technical Summary
- Volume 2 Environmental Impact Assessment Report
- Volume 3 Appendices to Environmental Impact Assessment Report

2 DESCRIPTION OF DEVELOPMENT

This chapter provides a description of the site, receiving environment and the proposed development.

Description of the site

The land subject to this planning application is located at Cornamaddy, Athlone, Co. Westmeath, approximately 2km to the northeast of Athlone Town Centre. The site is generally bounded by surrounding greenfield lands to the south-west by an existing cemetery and a Pitch and Putt Club bordering the site to the north-west. The site is also bounded by a number of extant permissions (currently under construction) within the same development to the east and south.

The parent permission for the development to the south is currently under construction, i.e. WMCC reg. ref. 14/7103. It is noted that Phase 3 (reg ref. 22/577) has made amendments to WMCC reg. ref. 14/7103 and is currently subject to Further Information. A permitted layout for 75 units to the east of the subject site was also granted in 2022 i.e. Phase 1 (reg ref. 22/253). A number of units in the Phase 1 permitted layout back onto the subject site. Phase 2 (reg ref. 22/340) was granted this year (07/03/2023) and is subject to 11 no. conditions.

There is also an existing residential housing development 'Drumaconn' to the southeast of the subject site, bordering the Phase 3 subject site.

The site is defined by the proposed distributor roads outlined in the Cornamaddy Action Area Plan to the south and east. The Action Area Plan also denotes an area of zoned Open Space along the northern boundary of the site. it is noted that the access and egress road for this development is partially in existence, currently providing access and egress to the constructed 'Drumaconn' residential development off the Ballymahon Road - N55. As previously stated in "Phase 3" of the overall development of the Cornamaddy lands by the Applicant, which is currently at Further Information Stage under WMCC reg. ref. 22/577 to the south east of the site, this road shall be extended as part of the permission granted under WMCC reg. ref. 14/7103, and further extended into the development site as part of the application lodged to WMCC currently awaiting a decision under WMCC reg. ref. 22/253 (Phase 1). Phase 3 will offer a further extension to the Distributor Road through the Cornamaddy lands, extending the road westwards from the section of road included in the planning application lodged to WMCC reg. ref. 22/253.

It is envisioned that the section of the distributor road provided as part of Phase 3 Reg. ref. 22/577 will contribute towards the deliverance of the entirety of the distributor road, envisioned to traverse the central portion of the Cornamaddy lands as they are developed. The subject proposal will join this section of the envisaged distributor road through the central portion of the Cornamaddy lands, which shall also facilitate development and provision of public transport linkages.

The subject site is on the north eastern periphery of Athlone Town, with the town main street located approximately 2km to the south west of the development site, which is ideally located for residential development, outside the town centre but close to facilities and services. There are schools, supermarkets, a library and restaurants all within walking distance of the proposal site.

Aside from availing of the many amenities that Athlone to the south west of the subject site has to offer, the development site is proximate to several retail and retail warehousing services including SuperValu and Spar on the Ballymahon Road and Proposed Development

Marina Quarter Limited intend to apply to Westmeath County Council for permission for a residential development proposal at Lands at Cornamaddy, Athlone, Co. Westmeath, approximately 2km to the northeast of Athlone Town.

We wish to highlight from the outset, that our client is committed to working with the Planning Authority to deliver on a residential proposal that is appropriate to the site and the surrounding context at Cornamaddy. The residential scheme is designed in line with the pattern of the surrounding residential development and the current market demand for the wider Athlone area. The site masterplan is shown on figure 2.2 below:



Figure 2: Proposed Site Layout

The development will comprise of a residential development and public open space comprising the following:

Construction of 177 no. residential units on a gross site area of 7.31 ha ranging in height from 2-3 storeys comprising detached, semi-detached, and terraced houses, maisonettes and 3 storey duplex apartments. 65 no. 2 bed houses, 71 no. 3 bed houses and 9 no. 4 bed houses will be provided. 24 no. 1 bed maisonette apartment units and 8 no. 3 storey duplex apartment units will be provided.

All associated private open space in the form of gardens/terraces. All pedestrian and vehicular access roads and footpaths including a section of the planned east/west distributor road connecting to a section of the distributor road permitted under WMCC Reg. Refs 14/7103/ ABP Ref. PL25.244826 and 22/253 and proposed under concurrent application WMCC Reg. Ref. 22/577 to the south east of the site. The proposed development includes amendments to permissions granted within the applicants landholding at Cornamaddy as follows: Minor modifications to the internal access road layout and open space permitted under WMCC Ref. 22/253 and minor modifications to a section of the distributor road proposed under concurrent application WMCC Ref. 22/577. Minor modifications to the road permitted for access to the creche facility granted under WMCC Reg. Ref. 22/340 to provide turning heads and access to parking associated with the proposed duplex units. Minor modifications to the rear private gardens of units no's. o61, o62 and o63 permitted under WMCC Ref. 22/253 to provide additional private open space. All associated site development works, services provision, drainage works, zoned open space/linear park (c.1.09ha), residential public open space areas (c.o.82ha in total), landscaping, communal open space serving the duplex

apartments (c.o.o2ha), landscaping, boundary treatment works, public lighting, associated esb substation cabinets, bin stores and car and bicycle parking provision. This development will form part of a larger phase of permitted and proposed development. This planning application is accompanied by an Environmental Impact Assessment Report and Natura Impact Statement. The application is available for public 03/77/2023 viewing at the following website: www.cornamaddylrd.ie.

Unit Breakdown

Houses:

```
House Type B – 4 bed Detached (148 sq.m) – 3 no. units
House Type B1 – 4 Bed Semi Detached (148 sq.m) – 4 no. units
House Type B2 – 4 Bed Detached (148 sq.m) – 2 no. units
House Type C – 3 Bed Semi Detached – (99 sq.m) – 2 no. units
House Type D – 3 Bed Semi Detached (91 sq.m) – 7 no. units
House Type D2 – 3 Bed Semi Detached (91 sq.m) – 6 no. units
House Type D3 – 3 Bed Semi Detached (91 sq.m) 3 no. units
House Type E – 2 Bed Terraced (74 sq.m) – 48 no. units
House Type E1 – 2 Bed Semi Detached (74 sq.m) – 8 no. units
House Type E2 – 2 Bed Semi Detached (74 sq.m) – 5 no. units
House Type E<sub>3</sub> – 2 Bed Terraced (74 sq.m) – 4 no. units
House Type F – 3 Bed Semi Detached (101 sq.m) – 5 no. units
House Type F1 – 3 Bed Semi Detached (101 sq.m) – 9 no. units
House Type F2 – 3 Bed Semi Detached (101 sq.m) – 33 no. units
House Type F3 - 3 Bed Terraced (101 sq.m) - 4 no. units
House Type F4 – 3 Bed Semi Detached (101 sq.m) – 2 no. units
```

Apartments

Maisonette -Maisonette Type P1 1 Bed – (56 sq.m) – 12 no. units Maisonette Type P2 1 Bed (62 sq.m) – 12 no. units Duplexes -

Duplex Type G1 3 Bed (115 sq.m) - 4 no. units Duplex Type G2 3 Bed (115 sq.m) - 2 no. units Duplex Type G₃ 3 Bed (115 sq.m) – 2 no. units

Part V Provision

19 no. units of the 177 -no. total will be provided as Part V units. This has been discussed and agreed with the Westmeath County Council Housing Department prior to lodgement of this application.

The breakdown of Part V unit typology is as follows:

- O House Type E (2 bed terraced) 8 no. units
- House type B (4 bed semi detached) 1 no. unit
- House Type F (3 Bed Semi Detached) 2 no. units
- o Maisonette Type P1 (1 bed) 4 no. units
- o Maisonette Type P2 (1 bed) 4 no. units

3 PLANNING AND DEVELOPMENT CONTEXT

This chapter has been prepared to consider the relevant planning polices that relate to the development site, the wider Wetmeath County and National development objectives. It considers strategic and local level plans relevant to the subject development and a review of the national and regional policy context inclusive of local statutory plans in place to govern the sustainable development of Westmeath.

The following relevant planning documents were considered by the project design team during the planning process:

- National Planning Framework Project Ireland 2040
- Rebuilding Ireland: Action Plan for Housing and Homelessness
- Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031
- Design Manual for Urban Roads and Streets 2019
- Smarter Travel A New Transport Policy for Ireland 2009-2020
- Sustainable Residential Development in Urban Areas (2009)
 - a. Urban Design Manual Best Practice Guidelines
- Delivering Homes, Sustaining Communities (2008)
 - a. Best Practice Guidelines Quality Housing for Sustainable Communities
- Guidelines for Planning Authorities on Childcare Facilities (2001)
- The Planning System and Flood Risk Management (2009)
- Urban Development and Building Height Guidelines (2018)
- Housing for All A New Housing Plan for Ireland (2021)

It is considered that the proposed development is consistent with the objectives and visions for sustainable development as set out in the above planning policy documents. The proposal offers a high-quality residential development of appropriate density proximate to services and facilities in Athlone Town, providing 177 new dwellings which will contribute to the national housing supply and overall development on the Cornamaddy lands.

Westmeath County Development Plan 2021-2027

A housing strategy for Westmeath that covers the life of the County Development Plan from 2021 to 2027 has been prepared to ensure the proper planning and sustainable development of Westmeath and address the overall supply of housing within the administrative boundary of the Local Authority.

The key objectives outlined within the housing strategy are as follows:

- To identify the existing need and likely future demand for housing in the area of the County Westmeath Development plan.
- To ensure Westmeath County Council provides for the development of sufficient housing to meet projected future demand over the lifetime of the County Development Plan.
- To ensure that sufficient zoned lands are provided to meet the needs of different households of all types and tenure.

The Housing Strategy plays a key role in the transition of housing policy from national level through to local level.

Table 8 of Section 3 of the Housing Strategy outlines the Annual Population Projections for Westmeath. It is predicted that there will be a total Population increase of 10,483 across the county between the years 2021 and 2027.

This population growth will translate to a need for 4,983 new residential units to be built across Westmeath between 2021 and 2027.

Athlone is a Key Growth Centre within the county. The housing strategy states in section 2.1 shows that urban areas in Westmeath (Athlone, Mullingar, Kinnegad and Moate) experienced a collective population growth of 14.2% between 2011 and 2016.

The population of Athlone at the time of Census 2016 was 21,349. This is predicted to grow to 27,693 by 2027, a growth rate of 30%.

The proposed development seeks to aid towards the fulfilment of housing targets for Westmeath by providing 177 no. new units in Cornamaddy, Athlone, on the North-eastern periphery of Athlone Town, which has been subject to rapid population growth. The proposal provides a variety of unit typologies and sizes offering houses ranging from 1, 2, 3 and 4 bedrooms, which will cater for the demand for units caused by the recent population growth in Athlone and predicted population growth towards 2027.

The project Architect, Doran Cray, has given extensive consideration to the DEHLG Guidelines on 'Quality Housing for Sustainable Communities – Best Practice Guidelines for Delivering Homes Sustaining Communities' (2007), 'Delivering Homes Sustaining Communities – Statement on Housing Policy' (2007), 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities' (2018) and 'Sustainable Residential Development in Urban Areas' and the accompanying 'Urban Design Manual: A Best Practice Guide' (2009)' when designing the proposal.

CPO 16.21 outlines the council strategy for Public Open Space Provision and Recreational Amenities and states that:

'In general, 15% of gross site area should be provided for multifunctional open spaces at suitable locations within new residential schemes. These open spaces should be easily accessible to all residents and provide for both passive and active uses for persons of all abilities regardless of age or mobility and including design measures and features incorporating sensory design aids, and landscaping, where feasible'.

The proposal offers 0.78ha of public open space within the residential zoned portion of the development site, making up 16% of the net site area. This is in addition to the 1.09ha of Open Space zoned lands located to the north-western portion of the development site (linear park) and towards the middle of the site (5 no. pocket parks and 1 no. oval area and playground), that will be appropriately addressed with a high quality landscape proposal as part of the subject scheme.

It should be noted that there are additional areas of open space included within the development site that have not been included in the total calculation for public open space that will be landscaped as part of the proposed development.

Chapter 16 of the Westmeath County Development Plan 2021 – 2027 presents Development Management Standards. We submit that all relevant Development Management Standards have been considered and complied with.

Athlone Town Development Plan 2014-2020

The Athlone Town Development Plan 2014-2020 is the relevant statutory planning policy document for the subject lands. This plan is due to be replaced by a new Urban Area Plan for Athlone however no draft of a replacement plan has been prepared as of April 2022. The plan is generally supportive of high-quality residential development providing that it adheres to the sustainable development and proper planning of the area and the objectives and policies supporting this.

The site extends across residential and open space zoned areas as follows:

- **Residential 0-LZ1** 'To provide for residential development, associated services and to protect and improve residential amenity'.
- **Open Space o-LZ8** 'To provide for, protect and improve the provision, attractiveness, accessibility and amenity value of public open space and amenity areas'

Section 13.2.7 of the Athlone Town Development Plan 2014 – 2020 outlines the following vision for areas zoned for the provision of open space:

'To provide for, protect and improve the provision, attractiveness and accessibility of public open space and amenity areas intended for use for recreational or amenity purposes. Only development that is incidental to, or contributes to the enjoyment of open space, amenity or recreational facilities will be permitted within this zone'.

We submit that this objective for lands zoned Open Space has been considered and respected in the layout of the proposed scheme. The development has been designed to protect the existing light shrubbery and trees, which form a boundary to the north-west and south-west of the development site, which enclose the proposed linear park. This area in the northern portion of the development site will be appropriately landscaped with high quality finishes to ensure that it is a space that future residents of the development and the public can interact with within the development site. This park also serves a dual purpose: protecting the edge of the western portion of the site and seamlessly integrating green links into the overall urban design structure of the neighbourhood. By preserving the natural beauty and open vistas of the western boundary, this linear park acts as a buffer zone, harmoniously blending the built environment with the surrounding natural landscape.

4 ALTERNATIVES CONSIDERED

This chapter provides an outline of the main alternatives examined during the design phase. It sets out the reasons for choosing the development as now proposed and considers the environmental impacts of the chosen option that have arisen as part of the evolving design process.

The requirement to consider alternatives within an EIAR is set out in Annex IV (2) of the EIA Directive (2014/52/EU) and in Schedule 6 of the Planning and Development Regulations, 2001, as amended, which state:

"A description of the **reasonable alternatives** studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment."

As such, the consideration and presentation of the reasonable alternatives as studied by the project design team is an important aspect of the EIA process. The alternatives examined throughout the design process are set out as follows:

Alternative Locations

Given the sites appropriate zoning for residential development, the applicants previous experience with developing successful residential schemes in the county and the physical site suitability, the subject site was considered an ideal location by the applicant for the development of a new residential scheme.

No alternative locations for the proposed development were considered in this case. The subject lands are appropriately zoned for residential development and the provision of public open space.

Option 1

Option 1 represents the initial design concept for the scheme worked up by the project Architects, Doran Cray and presented to Westmeath County Council at Section 247 pre planning stage.

The initial design concept considered of 174 no. units total with a unit mix as follows:

- 12 no. 2 bed houses
- 128 no. 3 bed houses
- 18 no. 4 bed houses
- 8 no. 2 bed duplex apartment units
- 8 no.3 bed duplex apartment units

Option 2

Option 2 presented a more advanced scheme design which was presented to the Planning Authority at Section 32B LRD Meeting Stage. Design Option 2 was informed by the comments presented to the design team regarding the Option 1 development at Section 247 pre planning meeting stage and consisted of the following:

Construction of 177 no. residential units ranging from 2-3 storeys comprising 145 no. houses and 36 no. maisonette and duplex apartments consisting:

- 68 no. 2 bed terraced houses (c.74sqm each);
- 74 no. 3 bed semi-detached and terraced houses (c.91-101 sgm each);
- 8 no. 4 bed detached and semi-detached houses (c.150sqm each);

- 24 no. 1 bed maisonette apartments (c.56-62sqm each);
- 8 no. 3 bed 3 storey duplex apartments

This option 2 design whilst still concept, offered a more comprehensive picture of how this phase of the development on the overall Cornamaddy lands could be completed in line with the other proposed and granted phases of development on the Cornamaddy Lands proposed by the Applicant, to align with the masterplan for the Cornamaddy area, and to consolidate the development of the applicants Landholding at Cornamaddy as an entire new residential neighbourhood to the northeast of Athlone Town.

The proposal from this phase was subject to design input from all wider design team members and the applicant, and roads layouts, landscaping and further changes to the architect's layout were implemented. This scheme was then presented to Westmeath County Council at Section 32B LRD Meeting Stage.

Westmeath County Council Assessed the submitted scheme and issued an LRD Opinion Report, which outlined that the proposed scheme constituted a reasonable basis on which to make an application for a Large-Scale Residential Development. There were a number of comments made by the Westmeath County Council Planning Department and other relevant departments. All items are now addressed by Option 3 – Chosen Design Option.

Key points made by Westmeath County Council in the LRD Meeting and LRD Opinion Report were as follows:

- Proposals to ensure potential conflict associated with creche car parking/setdown area and apartment car parking serving duplex units to be addressed.
- Having regard to extent of development within the overall landholding an active play area such as an Astro turf or basketball court etc would be welcomed within this phase.
- Proposals to provide greater streetscape and active frontage addressing the distributor road by way of fronting units onto this road and omission of gables and garden boundary walls.
- Proposals to provide active frontage addressing open space tract of land to north of site and thereby improve passive surveillance of this area.

It is submitted that the above key points raised by Westmeath County Council in relation to the Option 2 scheme design along with all other items included within the issued LRD Opinion Report have now been addressed within the Option 3 – Chosen Options design option below.

The development will comprise of a residential development and public open space comprising the following:

• Construction of 177 no. residential units on a gross site area of 7.31 ha ranging in height from 2-3 storeys comprising detached, semidetached and terraced houses, maisonettes and duplexes. 65 no. 2 bed houses, 71 no. 3 bed houses and 9 no. 4 bed houses will be provided. 24 no. 1 bed maisonette apartment units, 8 no. 3 storey 3 bed duplex units will be provided.

5 POPULATION AND HUMAN HEALTH

This chapter has been prepared to assess the likely impacts, if any, associated with Human Health and population that may arise from the proposed development. In Accordance with the Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA 2022), Draft Advice Notes for Preparing Environmental Impact Statements (EPA 2015) and European Commission Environmental Impact Assessment Report (EU 2017). This chapter considers the "existence, activities and health of people", with respect to "topics which are manifested in the environment such as employment and housing areas, amenities, extended infrastructure or resource utilisation and associated emissions".

The chapter focuses on the human environment proximate to the proposed development in terms of population profile, employment, land use and social patterns, human health and traffic congestion.

Receiving Environment

The Central Statistics Office (CSO) provides data on population and socio-economic aspects of the population at a State, County and Electoral District level. The subject site falls with the 'Moydrum' Electoral Division (ED) and within the administrative area of Westmeath County Council. The most recent census of population was undertaken by the CSO in 2022

It was considered that a catchment area of 4km was appropriate to encapsulate the relevant population surrounding the site. This radius was decided due to the distance of the subject site to Lough Ree to the North, and the rural areas featuring small populations to the west, south and east outside the immediate environs on Athlone Town.

Demographic Trends for the defined catchment areas were reviewed based on the Census 2022 data for the Dublin County area and Small Area Population Statistics (SAPs) for the District Electoral Divisions (DEDs) of Moydrum (Subject site location), Glassan, Athlone East Rural, Athlone East Urban and Athlone West Urban.

A review of the Moydrum, Glassan, Athlone East Urban, Athlone East Rural and Athlone West Urban age profiles confirmed that communities in the electoral division in which the subject site is located and surrounding electoral divisions have an age profile that is generally weighted towards a younger population group. This can be attributed to the growing trend of new residential development in the Athlone area which gives younger people an opportunity to purchase a home at lower prices than Irelands larger cities, and the location of the Technological University of the Shannon within Athlone, which attracts younger people studying to the town. The young population located in Athlone has made it a key growth centre for continued residential development given its central location in Ireland and benefit of having a university.

Accommodation - Household Size

In accordance with CSO 2022 figures, the average household size in Ireland is 2.74, which has decreased from 2.75 in 2016, but increased from the 2011 figure of 2.73. Household size in Ireland Statewide has stayed consistent throughout the 2011, 2016 and 2022 Census periods.

From examining the 5-no. surrounding electoral divisions to the subject site, it is concluded that the average household size in the areas surrounding the subject lands is 2.63, falling slightly below the national average.

Employment

In accordance with National, Regional and Local policy, there is an identified need to accommodate future generation through the proper planning and development of new neighbourhoods. It envisages that a certain level of local employment will arise from the increase in population and the associated increase in employment opportunities. It is considered that the proposed development will have an increasingly positive effect on employment in the local community.

Retail Provision

It is concluded that there is sufficient retail facilities in the area to cater for the proposed scheme. There is an array of supermarket and local shops in the vicinity of the proposed development that the future residents of the development will avail of.

The new resident population will provide an increased market for the local shops and services and may result in the creation of employment opportunities to cater for this increased demand for goods and services.

Potential Impacts of the Proposal at Construction and Operation Phase

It is considered that the proposed development will lead to inevitable short-term impacts throughout the construction phase. These can be summarised as:

- A temporary increase in vehicular traffic
- A temporary increase in noise, dirt and dust generation
- A temporary increase in the employment opportunities arising from the construction of the development

A proposal of this nature at the subject site would have the following potential impacts during its operational phase:

- Increase the population of the area
- Increase demand for local resources
- Increase support and demand for local businesses and services
- Increase level of local traffic
- Change the character and appearance of the subject site
- Increase critical mass capable of supporting increased public transport options

The resident community would experience these impacts in several ways. The growth in population of the neighbourhood may exert pressure on existing residential facilities ranging from public service facilities, community and commercial uses and schools. The existing local business community would be expected to receive increased patronage.

The community may experience a change in mobility consequent to increased congestion of the road network or actual physical development.

An alteration to the actual physical environment of the neighbourhood may affect the spatial perceptions of the community living in this area. However, it should also be noted that the increased population resultant from the proposed development will help underpin the viability of existing community, social and recreational facilities as the existing receiving community ages. The proposed development will provide new community, thus adding to the vitality of the existing community.

An increase in the residential and working population would ultimately increase the critical mass of the area and therefore provide a significant support base for the introduction of public transport systems over the longer term.

6 LAND, SOILS AND GEOLOGY

An assessment of the potential impact on the existing land, soil and geological environment was carried out by Enviroguide Consulting for the Proposed Development Site.

The assessment was carried out taking cognisance of the appropriate national guidelines and standards for Environmental Impact Assessment using data collected from a detailed desk study, results of the ground investigation, a site walkover survey and review of all relevant drawings and documents pertaining to the Proposed Development and Site. The results of the assessment provided information on the baseline conditions at the Proposed Development Site. A detailed assessment of the potential impact was undertaken, and appropriate avoidance and mitigation measures were identified to reduce any identified potential impact associated with the Proposed Development.

The construction of the Proposed Development will require excavation of approximately 14,600m3 topsoil and 26,198m3 sub grade material for the construction of building foundations, surface water and foul water drainage, roads, car parking areas and all ancillary works. Where possible, it is intended to retain and re-use the excavated soil and subsoil on the subject site for engineering fill and landscaping. However, it is anticipated that surplus material will require removal offsite.

The construction of the Proposed Development will also require the importation of aggregates for the construction of roadways, footpaths and utility infrastructure.

A Construction Environmental Management Plan (CEMP) (Paul Mc Grail Consulting Engineers Limited, 2023c) has been prepared as part of the planning application. The appointed Contractor will further develop the CEMP to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground having the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA - C532', CIRIA, 2001).

The CEMP will be implemented for the duration of the Construction Phase, covering construction and waste management activities that will take place during the Construction Phase of the Proposed Development.

Mitigation measures will be adopted as part of the construction works for the Proposed Development. The measures will address the main activities of potential impact which include:

- Control and Management of Earthworks;
- Control and Management of Soils and Stockpiles;
- Management and Control Procedures for the Exportation of Surplus Soils and Bedrock;
- Management and Control Procedures for the Importation of Fill Materials;
- Control and Handling of Cementitious Materials;
- Control and Handling of Fuel and Hazardous Materials; and
- Accidental Release of Contaminants.

The Operational Phase of the Proposed Development consists of the typical activities in a residential area and with the exception localised gardening works by residents, there will be no bulk excavation of soils or bedrock or infilling of waste. There will be a land take effect of 7.31Ha for the Construction of the Proposed Development and the land use at the site will change from undeveloped land to residential land use.

The previous site investigation report (GII, 2022) included in Appendix 6.1 has identified localised areas of made ground across the Site. There will be a requirement for the excavation and removal of soil including made ground with some localised soils impacted with low levels of anthropogenic contamination (i.e., petroleum hydrocarbons) and permanent removal off-site that will result in a positive impact on the quality soils underlying the Site.

Overall, there will be no significant adverse impacts on, or associated with the land, soils in the proposed Development.

7 HYDROLOGY

The potential for effects during the construction and operational phases of the proposed development on hydrology (surface and groundwater) is assessed in this chapter. The assessment is based on a desktop study, a site visit, and review of proposed development details. The assessment methodology follows that which is contained in the EPA's 2022 Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.

The existing environment at the site was noted during the site walkover. The site is greenfield, composed of grassland and hedgerows. There were no obvious potential sources of contamination seen on site. The topography is relatively flat with some undulations within the site. Ground permeability appears to be poor, however the drainage channels which run through the site were predominantly dry during the site visit. These drain towards a stream which itself drains towards Lough Ree, one of the three major lakes on the River Shannon. From here, the River Shannon flows through Athlone and continues south, eventually meeting the sea at the Shannon Estuary, between Limerick and Clare.

Construction activities have the potential to negatively affect surface waterbodies via increased silt and sediment runoff, and pollution from chemicals such as hydrocarbons and lubricants. These pollutants could reach the River Shannon or Lough Ree via overland drainage or surface water drainage. Changes to runoff and flow pathways could also occur due to excavation activities during construction. Construction activities also have the potential to affect hydrogeology by removing the protective cover for groundwater or through spills infiltrating to the groundwater layer.

Construction works will be carried out in accordance with the Construction Environmental Management Plan (CEMP) prepared by Paul McGrail Consulting Engineers and submitted as part of the planning application submission. The CEMP will include standard best practice guidance for the protection of water quality, and specific mitigation measures such as the control, treatment and monitoring of surface water runoff, and pollution prevention measures for both surface and groundwater, such as bunding, spill management and inspection procedures.

With the proposed mitigation measures in place, no significant effects are anticipated on hydrology during the construction phase.

The proposed development includes an operational drainage design in accordance with the guidelines, which includes on-site treatment and filtration of surface and stormwater, through the use of suitably sized green roofs, filter drains, and petrol interceptors. The proposed development, when occupied, will have a neutral effect on hydrology. No mitigation measures are proposed, except regular visual inspection and clean out of silt traps and hydrocarbon interceptors.

A review of historic flood information confirms that there has been no identified flood risk within or surrounding the site. The site walkover also did not identify any signs of inundation onsite. The site is not indicated as being at risk of flooding for any of the three AEP scenarios within the CFRAM study. The stream at the site boundary has not been included within the CFRAM programme. Review of the stream confirms that is a small waterbody with a minor catchment at the site, and therefore presents a limited flood risk to the site.

With the proposed mitigation measures in place during construction, and the proposed drainage design during operation, the residual effects of the proposed development on hydrology are long-term, not significant.

8 **BIODIVERSITY**

The assessment considered the potential direct, indirect and cumulative impacts on biodiversity within the zone of influence of the Proposed Development and the entire applicant's landholding in Cornamaddy, Athlone, Co. Westmeath. 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).

Baseline ecology surveys were undertaken at the Site between September 2021 and August 2023, which included habitat and flora surveys, terrestrial mammal surveys including a badger-specific survey, bat surveys (including transect activity surveys and an emergence survey), breeding bird surveys and wintering bird surveys.

The following key ecological receptors were identified within the Site or occurring within the zone of influence of the Proposed Development: foraging/commuting bats, nesting/foraging bird assemblage, foraging/commuting badgers, other small mammals and amphibians, as well as the following habitat types: hedgerow, treeline, scrub, drainage ditches and depositing / lowland river. In addition, Lough Ree and its associated aquatic fauna was identified as a key ecological receptor, given the hydrological connectivity to the Proposed Development via the drainage ditches and Kippinstown and Garrynafaela streams.

Two European sites and one nationally designated site were identified as key ecological receptors. The accompanying Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) completed for the Proposed Development (Enviroguide, 2023a and Enviroguide, 2023b) identified Lough Ree SAC and Lough Ree SPA as being within the potential zone of influence of the Proposed Development, and thus by proxy, Lough Ree pNHA. Upon the application of the suite of mitigation measures as outlined in the NIS, it was determined there would be no potential for significant effects on any of these three designated sites.

Potential impacts of the Proposed Development during Construction, in the absence of suitable mitigation, are considered to be: damage to root protection areas of trees, direct loss of scrub, hedgerow, treeline, drainage ditch habitat, loss of nesting, foraging and commuting habitat for birds, bats, amphibians and small mammals, entry of pollutants into the Kippinstown watercourse causing water quality deterioration, also potentially affecting downstream aquatic fauna, direct mortality of small mammals during clearance of vegetation or entanglement in construction materials, construction-related noise and visual disturbance to breeding birds, bats, amphibians and small mammals.

Potential impacts of the Proposed Development during Operation include: reduction in habitat quality related to poor management of retained features, reduction in freedom of movement of badger and other mammals due to walls / fencing and human-related noise and visual disturbance potentially affecting mammals and bats.

A comprehensive suite of mitigation measures are outlined for the Site of the Proposed Development. 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, the implementation of the mitigation measures and the associated planning application documents, to avoid or minimise the effects of the proposed development on the receiving environment, the Proposed Development will not result in long-term significant effects on designated sites, habitats, bats, breeding birds, wintering birds, amphibians, badger and other small mammal populations or any aquatic fauna associated with the Kippinstown Stream or Lough Ree. Positive impacts include the retention of as many hedgerows and treelines as possible, planting of pollinator-friendly species from a reputable source and the creation of a corridor for wildlife throughout the applicant landholding connecting the Proposed Development with the wider area.

9 AIR QUALITY AND CLIMATE

This air quality and climate assessment examines the potential for the Proposed Development to impact upon air quality and climate within the vicinity of the site. This chapter also describes and assesses the impact of the Proposed Development on local climate and on global climate in a wider context.

The primary sources of dust identified include soil excavation works, demolition, bulk material transportation, loading and unloading, stockpiling materials, cutting and filling, and vehicular movements (heavy good vehicles and on-site machinery).

In line with Transport Infrastructure Ireland guidelines (TII, 2011), a semi-quantitative has been undertaken to assess the potential dust emission effects. To account for a worst-case scenario, the Proposed Development is considered to be major in scale due to the size of the site and the duration of construction activities. Therefore, it can be assumed that there is potential for significant dust soiling effects on receptors within 100m from the site. Sensitive receptors within 100m of the Proposed Development have been identified as residential dwellings which are located to the south of the site. Receptors located to the south of the site would require prevailing winds from the north to be potentially impacted by fugitive dust emissions. At these receptors, the frequency of winds (>5m/s) occurring from the direction of the dust source on dry days is 0.2%. Therefore, the appropriate conditions for fugitive dust emissions at these receptors are highly infrequent. It is expected that the following mitigation measures will prevent nuisance dust from resulting in any likely significant adverse effects:

- During working hours, dust control methods will be monitored as appropriate, depending on the prevailing meteorological conditions;
- The name and contact details of a person to contact regarding air quality and dust nuisance issues will be displayed on the site boundary;
- A complaints register will be kept on-site detailing all telephone calls and letters of complaint received in connection with construction activities, together with details of any remedial actions carried out;
- The contractor must demonstrate full compliance with the dust control conditions;
- Procedures will be put in place to monitor dust emissions;
- Dust minimisation measures will be reviewed at regular intervals during the
 works to ensure the effectiveness of the procedures in place and to maintain
 the goal of minimisation of dust through the use of best practice and
 procedures. In the event of dust nuisance occurring outside the site
 boundary, site activities will be reviewed, and satisfactory procedures
 implemented to rectify the problem;
- A speed restriction of 20 km/hr will be applied as an effective control measure for dust for on-site vehicles using unpaved haul roads;
- Bowsers or suitable watering equipment will be available during periods of dry weather throughout the construction period;
- Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic;
- Furthermore, any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions;
- During periods of very high winds (gales), construction activities likely to generate significant dust emissions should be postponed until the gale has subsided;
- Overburden material will be protected from exposure to wind by storing the material in sheltered regions of the site;

- Where feasible, hoarding will be erected around the site boundary;
- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting of sprays will be used as required if particularly dusty activities such as rock plasting or earthworks are necessary during dry or windy periods;
- Before entrance onto public roads, trucks will be adequately inspected to ensure there is no potential for dust emissions and will be cleaned as necessary;
- In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of construction operations;
- Vehicles delivering or collecting material with potential for dust emissions will be enclosed or covered with tarpaulin at all times when practicable to restrict the escape of dust; and
- Public roads outside the site will be regularly inspected for cleanliness, as a minimum on a daily basis, and cleaned as necessary.

As part of dust management measures, it is recommended that dust deposition monitoring be put in place during the Construction Phase of the Proposed Development to ensure dust mitigation measures are adequately controlling emissions.

Construction vehicles and machinery during the Construction Phase will temporarily and intermittently generate exhaust fumes and consequently potential emissions of volatile organic compounds, nitrogen oxides, sulphur oxides, and particulate matter (PM2.5 and PM10) (dust). Dust emissions associated with vehicular movements are largely due to the resuspension of particulate materials from ground disturbance. Air pollutants will increase due to construction-related traffic and machinery from the Proposed Development; however, any such increase is not considered significant and will be within relevant European Union Directive ambient air quality standards. According to TII (2011), the significance of effects experience by offsite receptors due to vehicle emissions during the Construction Phase will be dependent on the number of additional vehicle movements, the proportion of heavy good vehicles and the proximity of sensitive receptors to the site's access routes. If construction traffic would lead to a significant change (> 10%) in Annual Average Daily Traffic (AADT) flows near to sensitive receptors, then concentrations of nitrogen dioxide, PM₁₀ and PM_{2.5} should be predicted in line with the methodology as outlined within TII guidance. Construction traffic is expected to result in a significant change (e.g. greater than 10%) in AADT flows on roads near to sensitive receptors. Therefore, a detailed air quality assessment has been carried out. The results indicate that there may be some 'imperceptible', and 'small' increases in concentrations of NO₂ at worst-case receptors assessed when compared with 'Do Minimum' levels; with the highest predicted increase of 1.35µg/m³ at R6 in the 'Do Something' scenarios. However, this increase in traffic has been determined to have an overall imperceptible impact in terms of local air quality.

The most likely potential effect on air quality during the Operational Phase of the Proposed Development is from traffic-related air emissions. The air dispersion modelling concluded that the Proposed Development is likely to result in a long-term increase in nitrogen dioxide (NO_2) concentrations on the roads surrounding the site. The results determine that there may be some 'imperceptible', 'small' and 'medium' increases in concentrations of NO_2 at worst-case receptors assessed when compared with 'Do Nothing' levels; with the highest predicted increase of 1.41 μ g/m³ at R6 in the Opening Year and 2.07 μ g/m³ measured at R5 in the Design Year 'Do Something' scenarios. however, this increase in traffic has been determined to have an overall imperceptible impact in terms of local air quality. Furthermore, the increase in traffic has been determined as

marginal with regard to climatic impacts. Therefore, no residual significant effects are anticipated from the Proposed Development in the context of air quality and climate.

There is the potential for combustion emissions from onsite machinery and traffic derived pollutants of Carbon Dioxide (CO₂) and Nitrous Oxide (NO₂) to be emitted during the Construction Phase of the development. However, due to the size and duration of the Construction Phase, and the mitigation measures proposed, the effect on national greenhouse gas emissions will not be significant in terms of Ireland's obligations undep the Kyoto Protocol and therefore will have no significant effect on climate. Overall, climatic impacts are considered to be short-term, imperceptible and not significant.

A Flood Risk Assessment (FRA) was undertaken by Paul McGrail Consulting Engineers on behalf of the Applicant for the Proposed Development and has been included in this EIAR in Volume 3 - Appendices. This assessment concluded that the Proposed Development is considered to be adequately protected in consideration of future scenario of flood event in the area. The Site is within Zone C and is appropriate for the Proposed Development from a flood risk perspective. The Athlone Development Plan Flood Map shows that the Site falls outside the extents of the 100-year Fluvial Flood event. This was also evident from the Catchment Flood Risk Assessment (CFRAM) maps.

Following the implementation of the proposed mitigation and monitoring measures, there are not expected to be any likely significant effects on air quality during the construction and operational phases.

10 NOISE AND VIBRATION

Noise impacts associated with the proposed development has been considered in terms ·03/1/2023 of the following:

- Design in order to protect future occupants from external noise.
- Construction phase impacts on existing residential dwellings.
- Additional traffic once the scheme is opened.

Design goals were set to ensure compliance with the County Westmeath Noise Action Plan. Various national and international guidance were used to define suitable acceptable noise criteria and information of the ambient acoustic environment was derived from Strategic Noise Maps and a comprehensive noise monitoring programme.

The main observations were:

- Construction noise and vibration levels would not exceeded the adopted criteria.
- Traffic associated with the scheme would not increase existing noise level perceptibly.
- Upgraded glazing and vents to some road-facing facades are recommended

The impact assessment conducted for the construction activity during the construction phase has highlighted that the predicted construction noise levels are within the adopted criterion for almost all NSLs. However, the following mitigation measures may be considered during certain construction activities in order to further reduce the noise and vibration impact to nearby noise sensitive areas.

As part of these mitigation measures it is recommended that the Contractor should compile a Construction Environmental Management Plan (CEMP) which will deal specifically with management processes and strategic mitigation measures to remove or reduce significant noise and vibration impacts, and cumulative noise and vibration impacts from the construction works. The Plan will also define noise and vibration monitoring and reporting. The CEMP will also include method statements for each phase of the works, the associated specific measures to minimise noise and vibration in so far as is reasonably practicable for the specific works covered by each plan and a detailed appraisal of the resultant construction noise and vibration generated.

The contractor will provide proactive community relations and will notify the public and vibration sensitive premises before the commencement of any works forecast to generate appreciable levels of noise or vibration, explaining the nature and duration of the works.

The contractor will distribute information circulars informing people of the progress of works and any likely periods of significant noise and vibration.

With regard to potential mitigation measures during construction activities, the standard planning condition typically issued by The Westmeath Noise Action Plan states:

"In the case of other planning applications, a general requirement may be added such as 'Noise is kept to a minimum, in so far as is practical' during the construction phase of the development."

BS5228 includes guidance on several aspects of construction site mitigation measures, including, but not limited to:

• selection of quiet plant;

- control of noise sources;
- screening;
- hours of work;
- liaison with the public, and;
- monitoring.

PECENED. 03 Noise control measures that will be considered include the selection of quiet plant, enclosures, and screens around noise sources, limiting the hours of work and carrying out noise/vibration monitoring as required.

A suitable site hoarding would protect the residents immediately adjacent to the construction site.

By applying the guidelines in ProPG and BS8223, an Acoustic Design Statement (ADS) will provide the predicted interior noise levels based on the proposed construction and inform the building design. It will also present options to achieve the attenuation required should the predicted internal noise level exceed the required criteria.

The ADS does not consider the sound attenuation of internal elements such as walls and floor/ceiling or other acoustic topics; these are covered by Building Regulations, Technical Guidance Document, Part E.

The relatively small amount of additional traffic associated with the development's operational phase will not give rise to a perceived increase in noise levels.

In addition, following the principles of Good Acoustic Design set out in ProPG, acceptable internal noise levels can be achieved by providing suitable glazing and ventilators at the effected dwellings.

LANDSCAPE VISUAL IMPACT ASSESSMENT 11

Description

RECEIVED The proposed site is located in the townland of Cornamaddy in Athlone. The subject site comprises agricultural fields categorised by mature native hedgerows and tree lines, particularly on the western and northern boundaries. Currently, the site is under pasture with areas of scrub due to recent lack of grazing.

The fields are characterised by distinctive esker formations, in particular one large formation at the centre of the masterplan area which is to the north of the subject site. These landforms are visually distinctive and characteristic of the wider landscape of Westmeath, offering its own identity and a 'sense of place'. The site is a greenfield site which is zoned for residential development.

The proposed site is Phase 4 development of the masterplan in Cornamaddy. The proposed Phase 4 site is within the client's landholding and are made of two zones. Zone 1/ Parcel 1 forms the north-western part of the masterplan lands. This site area comprises three large fields (with a prominent esker formation) to the south of site and coupled with smaller parts of two neighbouring fields. Zone 2 / Parcel 2 is located north of the Drumaconn neighbourhood and towards the eastern end of the masterplan area. This zone is bound by the distributor road to the south, masterplan lands to the east and thick hedgerow and trees along the northern boundary and the N55 and roundabout to the east. Currently this zone is

Landscape Sensitivity

The proposed site falls within 'LCA 6 – Lough Ree and Shannon Corridor'. The lakes and lakeshore areas has significant conservation status, as SPA, SAC and NHA. A significant area of the LCA is also recognised as an 'Area of High Amenity'. As such, the landscape sensitivity around the lake, lakeshore and floodplains are 'high' and is of 'high' landscape

The proposed development site and masterplan lands lies within Athlone Town Boundary and within urban fringe areas. The lands are zoned for residential development. The lands are located 1km away from the sensitive landscapes i.e., lake, lakeshore and floodplains; and does not within an 'Area of High Amenity'. Therefore, the proposed site and immediate environs are not representative of the wider LCA value and its sensitivity.

The site's zoning is supportive of development on this site. The immediate surroundings along with the site are zoned for residential and open space uses. Some of the lands in Cornamaddy have already been developed and some with existing planning permission for development. The are other undeveloped land parcels in Cornamaddy that are either under design process or planning process. Therefore, the area is under rapid transition and is reflective of the zoning of the lands.

Therefore, the landscape sensitivity of the receiving environment (reflecting its zoning within the wider LCA) is classified as 'Medium' - Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong... 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.

Landscape Impacts

The landscape impacts during construction phase is expected to be of 'Moderate' significance, construction phase is generally adverse and temporary in nature

The landscape impacts during operational phase is expected to be of 'Moderate' significance. Qualitatively, the change is 'Neutral' in the short term and improving to 'Beneficial' in the long term once landscaping matures. This will be a permanent change in the landscape.

Visual Impacts

A total of 13 viewpoints were identified to assess visual impacts and effects.

During the construction phase the visual impacts is generally adverse but will last only during the construction phase, therefore is Temporary to Early Short Term in nature.

During operational phase, the proposed development is not visible in six of the identified viewpoints. The proposed development where visible has varying significance of 'Slight' to 'Moderate' significance. None of the viewpoints are experiencing significant change. Qualitatively, the effects are 'neutral'.

Cumulative Landscape Impacts

Cumulatively, the proposed development with other already built, permitted developments and proposed development would alter the landscape in line with the zoning and policy objectives of the Council. There is major landscape change expected from agricultural fields in an urban fringe area to sub-urban residential setting. Construction of other permitted phases have already begun on site.

Therefore, the cumulative landscape change on the receiving environment would be High i.e., Change that is moderate to large in extent, resulting in major alteration to key elements features or characteristics of the landscape... Such development results in change to the character of the landscape.

The resulting cumulative effect would be 'Moderate to Significant', depending in the proximity to the change. Qualitatively, initially the scheme would be a Neutral change. Overtime as the new landscape structure within the overall masterplan area evolves, established into the new residential area and forms as part of the wider landscape setting, the change is expected to improve to be 'beneficial' permanent change.

Cumulative Visual Impacts

The viewpoints were identified and located to inform the cumulative visual impacts of the proposed development along with other permitted and proposed developments in the masterplan lands and Cornamaddy Area.

The cumulative visual change is visible in 10 no. viewpoints. The cumulative visual change is of varying significance depending on the proximity and the significance varies from 'Slight to Moderate'. Initially adverse in some viewpoints but overall most viewpoints will experience neutral-beneficial change in the long term.

As landscaping proposals within the masterplan lands mature and forms part of the wider landscape, the significance is expected to be 'Moderate', and effects would be neutral in quality.

Summary

The proposed development would achieve local planning policy and zoning objectives for the site.

The proposed development has been prepared in accordance with best practice rational and regional guidelines and policies, including the 'Best Practice Urban Design Manual' (Department of Environment, Heritage and Local Government, 2009) and the 'Design Manual for Urban Roads and Streets' (Department of Transport, Tourism and Sport & Department of Housing, Planning and Local Government, 2013). The proposed overall development with other phases have been laid out to retain and enhance existing landscape features such as tree groups, green infrastructure (water movement) and urban surroundings.

12 ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL HERITAGE

This chapter assesses the effects of the proposed development on the cultural heritage resource, including archaeology and architectural heritage. The recorded and potential cultural heritage resource within a study area encompassing the fields within the proposed development boundary and the surrounding lands extending for 1km in all directions, was reviewed in order to compile a comprehensive cultural heritage baseline for the assessment.

The assessment was based on a programme of desktop research and a field inspection, and the assessment of impacts was carried out in accordance with current Environmental Protection Agency EIAR guidelines.

There are no recorded archaeological sites within the proposed development site and the only example (Mound barrow WMo29-041----) within the surrounding 1km study area is located 730m to the north. In addition, the proposed development is located c.2km outside the Zone of Archaeological Potential around the historic core of Athlone town as defined by the National Monuments Service. A review of historic cartographic sources, as well as modern aerial and LiDAR imagery, revealed no evidence for the presence of unrecorded archaeological sites within the proposed development site and no surface traces of any potential archaeological sites or structures of architectural heritage were identified during the field inspection. The potential for the presence of unrecorded, subsurface archaeological remains within the proposed development site is noted.

There are no Protected Structures, Architectural Conservation Areas or NIAH-listed buildings located within the proposed development site or within the surrounding 1km study area.

The only features of cultural heritage interest identified within the proposed development site are two townland boundaries forming the outer edge of the west and north ends of the site. The townland boundary between Cornamaddy and Cornanagh to the west remains on the same line as depicted on historic Ordnance Survey (OS) maps. While the linear field boundary along the north end of the proposed development site now forms the existing boundary with Garrynafela to the north, a review of OS mapping revealed that this division was created during the late 19th century and when an earlier curvilinear townland boundary located outside the north end of the site was removed. Townland boundaries are found throughout the Irish landscape and comprise undesignated features of local (low) cultural heritage value. Neither of the townland boundaries extends into the interior of the proposed development site and they will be retained *in situ*.

The construction and operational stages of the proposed development will result in no predicted effects on the known archaeological and architectural heritage resource. Ground excavation works during the construction phase will have the potential to result in permanent, direct, negative effects on any unrecorded sub-surface archaeological remains that may exist within the proposed development site and this will require mitigation. No potential significant cumulative impacts on the cultural heritage resource were noted during an appraisal of the proposed development in combination other developments in the area.

A programme of archaeological test trenching will be carried out in advance of the construction phase under licence by the National Monuments Service. In the event that any sub-surface archaeological features are identified during these investigations, any required additional mitigation measures, which may include preservation *in situ* by avoidance or preservation by record by archaeological excavation, will be formulated and enacted in agreement with the National Monuments Service. Preservation *in situ* shall

allow for a negligible magnitude of impact resulting in a potential imperceptible significance of residual effect on the unrecorded archaeological resource. Preservation by record would result in a nighting.

of a full and detailed archaeological record, the results of disseminated. This shall result in a potential slight to moderate range of significance of effect in the context of residual effects on the unrecorded archaeological resource.

TRAFFIC AND TRANSPORTATION 13

This section provides a non-technical summary of the traffic-related impacts associated with the development. A standalone Traffic and Transport Assessment was prepared by Roadplan Consulting. Classified traffic turning counts were undertaken to obtain an accurate representation of the traffic volumes and movements in the vicinity of the development. Transport Infrastructure Ireland (TII) traffic growth factors were applied to this data to estimate future year flows. The development flows to and from the site were calculated using the TRICS database. The residential development will cater for 177 residential unit. The peak hour vehicular trips a with the residential development is estimated to be 107 two-way trips in the AM peak and 114 two-way trips in the PM peak.

The distribution of generated traffic is assumed to mirror the pattern observed for existing arrivals and departures which currently access the N55 / R916 / L8048 roundabout.

Junction capacity analysis was undertaken for the existing N55 / R916 / L8048 roundabout for the base year, 2022, the opening year, 2024, and the future assessment years 2029 and 2039 (TII's "Traffic and Transport Assessment Guidelines" recommend the assessment of traffic in the Opening Year, the Opening Year +5 years and the Opening Year +15 years. The analysis concludes that the N55 / R916 / L8048 roundabout currently operate within capacity over all time periods.

Junction capacity analysis was undertaken for the overall Masterplan of the site and the adjoining residential zoned lands. The analysis concludes that the N55 / R916 / L8048 roundabout currently operate within capacity over all time periods with the Masterplan complete and adjoining residential zoned lands developed.

Parking provisions were assessed in accordance with the Westmeath County Development Plan 2021– 2027). A total of 239 parking spaces will be provided which is in compliance with the development plan.

In summary, traffic movements associated with the proposed development during its operational phase are low and the impacts on the capacity of the receiving road network are predicted to be small.

14 WASTE MANAGEMENT

This chapter provides an assessment of the potential impacts of the Proposed Development on waste management services.

All waste materials generated during the Construction and Operational Phase of the Proposed Development will be managed in accordance with the respective waste management plans.

The waste management objectives for the Proposed Development are as follows, and will facilitate material reuse and recycling, where possible, and seek to divert waste from landfill:

- Prevention: The Contractor will prevent and minimise waste generation where possible by ensuring large surpluses of construction materials are not delivered to the Site through coordination with the suppliers, operating a 'just-in-time' delivery scheme and ensuring sub-contractors conform to the Construction Environmental Management Plan;
- Reuse: Reusing wastes and surplus materials where feasible and in as many high value uses as possible;
- Recycle: Recycling wastes where possible such as introducing on-site crushers to produce waste derived aggregates which, subject to appropriate testing and approvals, may be re-used in the Proposed Development;
- Disposal: Where disposal of waste is unavoidable, this will be undertaken in accordance with the Waste Management Act 1996, as amended.

A Construction Environmental Management Plan (Paul McGrail Consulting Engineers Ltd, 2023 and a Construction Waste Management Plan (Paul McGrail Consulting Engineers Ltd, 2023) have been prepared for the Construction Phase of the Proposed Development and will be submitted with the planning application. Site clearance activities will occur in accordance with the Construction Environmental Management Plan and Construction Waste Management Plan.

It is intended, where possible, to maximise the reuse of clean/non-hazardous excavation material as landscaping or engineering fill following appropriate material testing and risk assessment to ensure the material is suitable for its proposed end use, to avoid importing raw materials. Excavated soil and stone pending reuse in the Proposed Development will be temporarily stockpiled in designated areas onsite during the Construction Phase.

Offsite removal of surplus clean soil and topsoil will be undertaken in accordance with the Construction Waste Management Plan and relevant waste management legislation. The site management team will keep records of the removal and certification on file on site. The offsite re-use of material will be prioritised to minimise the potential loss of valuable good quality soil and subsoil to landfill as a waste. The re-use of soil offsite will be undertaken in accordance with all statutory requirements and obligations including where appropriate re-use as by-product in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011 (SI No. 126 of 2011) as amended. Any surplus soil not suitable for re-use as a by-product and other waste materials arising from the Construction Phase will be removed offsite by an authorised contractor and sent to the appropriately authorised (licensed/permitted) receiving waste facilities. As only authorised facilities will be used, the potential impacts at any authorised receiving facility sites will have been adequately assessed and mitigated as part of the statutory consent procedures.

An Operational Waste Management Plan has been prepared for the Proposed Development by Paul McGrail Consulting Engineers (2023). Implementation of the Operational Waste Management Plan will ensure a high level of recycling, reuse and

recovery at the Proposed Development. The Operational Waste Management Plan presents a waste strategy that fully complies with all relevant wasted gislation, waste policies and best practice guidelines and will ensure effective waste management at the Site.

The cumulative effects of Proposed Development on waste management have been assessed taking other planned, existing, and permitted developments in the surrounding area into account. All relevant planning permission applications that have been granted and developed have been taken into account. The assessment concluded that the likely cumulative impact of the Proposed Development with other developments in the area during both the Construction and Operational Phases will be neutral and not significant on waste management facilities in the area in the long-term.

The implementation of the Construction Environmental Management Plan, Construction Waste Management Plan and Operational Waste Management Plan in conjunction with good environmental practice will ensure that there are no likely significant adverse effects to waste management as a result of the Construction Phase of the Proposed Development. The installation of additional litter and recycling bins with built-in cigarette/chewing gum receptacles, and the provision of adequate resources to service the bins, will reduce potential impacts from waste management during the Operational Phase of the Proposed Development.

MATERIAL ASSETS 15

This chapter prepared evaluates the protentional impacts, from the proposed development of Material Assets as defined in the EPA Guidelines 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022), Advice Notes Draft Advice Notes for preparing Environmental Impact Statements (EPA, 2015), and European Commission Guidance on Environmental Impact Assessment of Projects: Guidance on the Preparation of the Environmental Impact Assessment Report (2017)'.

As the nature of the potential for impact on material assets is derived from the cumulative impact of both the residential development, this chapter assesses the potential impacts of the development on site.

This chapter provides an evaluation of the following economic assets of the subject site and its surroundings:

Materials Assets of Natural Origin

- Agriculture
- Natural resources

Material Assets of Human Origin

- Local Settlement
- **Property Prices**
- Electricity supply
- Telecommunications
- Transport
- Water supply and sewerage
- Municipal Waste

It is considered that the proposed development will not have any significant impact on material assets including, most notably, public utilities and natural resources. The overall predicted impact of the proposed developments can be classed as long term and negligible with respect to material assets. The proposed development has been designed for, and the infrastructure constructed for, a residential development of this nature.

16 **CUMULATIVE IMPACTS**

This chapter has been prepared to consider the potential for cumulative impacts that may arise as a result of the proposed development in combination with any future development, as far as is practically possible, on the site and the cumulative impacts with both planned and permitted developments in the immediate surrounding area.

Cumulative impacts are the impacts that relate to the incremental/ additive impacts of the planned development to historical, present, or foreseeable future actions within reason. Cumulative impacts generally arise through the following:

- Persistent additions or losses of the same material or resource,
- Compounding effects due to the coming together of two or more effects.

The potential for cumulative impacts is assessed within this chapter for each relevant environmental factor, and the predicted impact is described. With proper implementation of mitigation measures where appropriate, it is predicted that there will be no long term significant cumulative impacts.

17 INTERRELATIONSHIPS BETWEEN THE ASPECTS

This chapter has been prepared to examine the potential interactions and interrelationships between the environmental factors as discussed in the preceding chapters.

All environmental topics are interlinked to a degree such that interrelationships exist on numerous levels. The relationships between each of the environmental topics covered within the Environmental Impact Assessment Report have been compared against each other to ensure that no negative impacts will arise from interrelationships between each individual aspect considered in combination.

In summary, it is concluded that the proposed development will not result in any significant synergistic effects on the environment.