

EIAR Volume 1

Non – Technical Summary

Proposed Residential Development

**Lands at Cornamaddy,
Athlone,
County Westmeath**

On behalf of

Marina Quarter Limited

December 2022



Planning & Development Consultants

63 York Road,

Dun Laoghaire

Co. Dublin

www.brockmcclure.ie

Westmeath County Council Planning Authority - Inspection Purposes Only

Table of Contents

1. Introduction	2
2. Description of Development.....	4
3. Planning and Development Context	7
4. Alternatives	9
5. Population and Human Health	10
6. Land, Soils and Geology	12
7. Hydrology	14
8. Biodiversity	15
9. Air Quality and Climate	17
10. Noise and Vibration	18
11. Landscape Visual Impact Assessment	19
12. Architectural, Archaeological and Cultural Heritage	21
13. Traffic and Transportation	22
14. Waste Management	23
15. Material Assets	24
16. Cumulative Impacts	24
17. Interrelationships Between the Aspects	25

Westmeath County Council Planning Authority - Inspection Purposes Only

1 INTRODUCTION

Overview of Site

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 1.1 below:

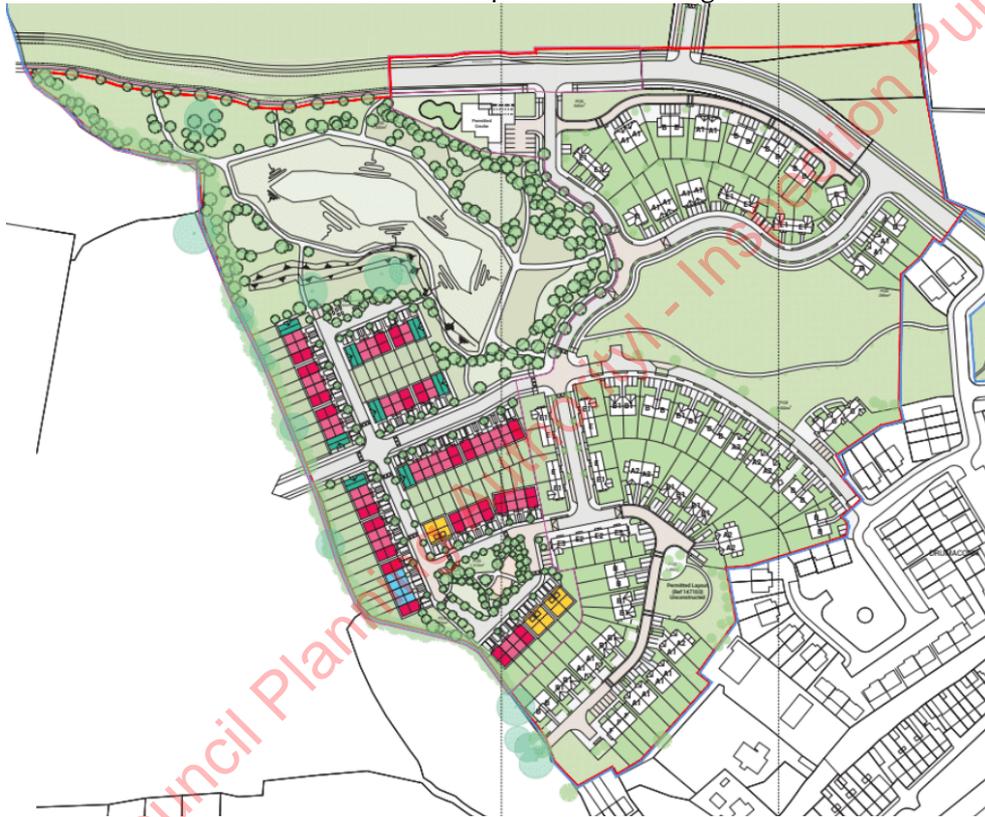


Figure 1.1: Site Masterplan Layout

The development will consist of Amendments to permitted application WMCC reg Ref. 14/7103/ ABP Ref. PL25.244826 for the removal of 38 no. permitted units (not constructed) to be replaced by: Construction of 70 no. residential units.

The northern portion of the applicant's landholding also has the benefit of a permission granted under WMCC Ref. 22/253 for 75 no. units in the northeastern portion of the applicants lands. It is envisaged that a further phase of development will be lodged in the future for c.170 units which will consolidate the development of the entirety of the lands as a new residential neighbourhood in Athlone, of c. 400 units' total.

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 Pleanála 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 immediate north, east and west, with an existing residential housing development 'Drumaconn' bounding the site to the southeast.

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. This road will 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 granted under WMCC reg. ref. 22/253. The subject development 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 the subject application 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 proposal is located on greenfield lands that have been subject to surrounding previous grants of permission for residential development by Westmeath County Council and An Bord Pleanala and has been earmarked for new residential development since the early 2000's. It is noted that the applicant is due to imminently begin construction of the Cornamaddy lands to the immediate south of the development site, permitted under WMCC reg ref. 14/7103.

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.

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 2.2 – Site Masterplan Layout

Westmeath County Council: Marina Quarter limited intend to apply for a 5-year permission for development at this site of total c.10.87ha on lands located at Cornamaddy, Athlone, Co. Westmeath. The site is generally bounded to the west by greenfield lands and Cornamagh Cemetery, to the north by greenfield lands, to the south by greenfield lands and the Ballymahon Road (N55) and to the east by the existing Drumaconn housing estate. The development will comprise of a residential development and public open space comprising the following:

- Amendments to permitted application WMCC reg Ref. 14/7103/ ABP Ref. PL25.244826 for the removal of 38 no. permitted units (not constructed) to be replaced by: Construction of 70 no. residential units comprising: 4 no. 2 bed terraced houses (c.78 sq.m each), 60 no. 3 bed semidetached (c. 96-116 sq.m each) and 6 no. 4 bed semidetached houses (c. 147 sq.m each) with associated private gardens.
- The creche facility, public open spaces, landscaping, roads layouts, car parking, boundary treatment works, public lighting and all associated site works associated with the 87 no. remaining units retained as permitted under WMCC Reg Ref. 14/7103 ABP Ref. PL25.244826 will remain unchanged.
- All pedestrian and vehicular access roads and footpaths including a section of the planned east/west distributor road connecting to a sections of the distributor road permitted under WMCC Reg. Refs 14/7103/ ABP Ref. PL25.244826 and 22/253 to the east of the site.
- All associated site development works, services provision, drainage works, public open space (c.1.03ha), landscaping, boundary treatment works, public lighting, associated esb substation cabinets, bin stores, car and bicycle parking provision.

- This development will form part of a larger/future phase of the development.
- This planning application is accompanied by an Environmental Impact Assessment Report and Natura Impact Statement

The northern portion of the applicant's landholding also has the benefit of a permission granted under WMCC Ref. 22/253 for 75 no. units in the northeastern portion of the applicants lands. It is envisaged that a further phase of development will be lodged in the future for c.170 units which will consolidate the development of the entirety of the lands as a new residential neighbourhood in Athlone, of c. 400 units' total.

Unit Breakdown

The now proposed phase of the overall development offers a range of unit types across the site with the residential scheme comprising 70 no. new houses. The unit mix proposed will cater for a wide demographic, with housing options ranging from 2 bed to 4 bed units. The proposed unit mix is detailed below:

Houses:

- 4 no. House type B1 (4 bed) Semi Detached (147 sq.m)
- 2 no. House type B2 (4 bed) Semi Detached (147 sq.m)
- 20 no. House type D1 (3 bed) Semi Detached (96 sq.m)
- 30 no. House type D2 (3 bed) Terraced (96 sq.m)
- 2 no. House type D3 (3 bed) Semi Detached (96 sq.m)
- 4 no. House type E5 (2 bed) Terraced (78 sq.m)
- 8 no. House type (3 bed) Semi Detached (116 sq.m)

A detailed breakdown of the units provided is outlined on the Site Statistics sheet prepared by Doran Cray Architects submitted as part of this planning application pack. The proposed development includes for the amendment of the existing granted permission on the subject lands (WMCC reg. ref 14/7103) to remove and replace 38 no. units that were permitted as part of this application that fall inside the subject developments redline boundary. The units to be replaced are as follows:

- 6 no. Unit Type A1 4 Bedroom House (130 sq.m)
- 8 no. Unit Type A2 – 4 Bedroom House (142 sq.m)
- 7 no. Unit Type A3 – 4 Bedroom House (142 sq.m)
- 4 no. Unit Type B – 3 Bedroom House (113 sq.m)
- 2 no. Unit Type B1 3 Bedroom House (113 sq.m)
- 7 no. Unit Type D – 4 Bedroom House (162 sq.m)

Part V Provision

7 no. units across the development site will be provided as Part V units. 71% of the units provided will be 3 bed units and 29% of the units will be 2 bed. The breakdown of Part V unit typology is as follows:

- 5 no. House type D2 (3 bed) Terraced (96 sq.m)
- 2 no. House type E5 (2 bed) Terraced (78 sq.m)

3 PLANNING AND DEVELOPMENT CONTEXT

This chapter has been prepared to consider the relevant planning policies that relate to the development site, the wider Westmeath 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 70 new dwellings which will contribute to the national housing supply and overall development on the Cornamaddy lands.

Westmeath County Development Plan 2021-2027

It is also considered that the proposed development is consistent with the objectives of the Westmeath County Development Plan 2021-2027 as follows:

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 2017, a growth rate of 30%.

The proposed development seeks to aid towards the fulfilment of housing targets for Westmeath by providing 70 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 2 to 4 bedroom, which will cater for the demand for units caused by the recent population growth in Athlone and predicted population growth towards 2027.

The design team has carefully considered the Housing Policies outlined in the Westmeath County Development Plan when designing the proposal.

The proposal contributes towards the objectives outlined in the county Housing Strategy by providing 70 units of the predicted requirement of 4,983 new residential units by 2027.

The proposal offers a variety of unit types which will cater for a broad spectrum of end user's needs and demand in the Athlone area, offering a variety of 2, 3 and 4 bed homes.

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 0.31ha of public open space within the residential zoned portion of the development site, making up 15% of the developable site area. This is in addition to the 2.40ha of Open Space zoned lands located in the northern portion of the development site, that will be appropriately addressed with a high quality landscape proposal as part of the subject scheme.

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 o-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 esker in the northern portion of the site to protect the vision for lands zoned Open Space. 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.

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.

Alternative Designs

A number of Alternative Designs for the scheme were undertaken by the project Architects, Doran Cray, prior to the arrival at the final project design as now submitted to the Planning Authority.

The final design of the scheme has evolved as part of a multi- disciplinary process with input from all EIAR team members.

The design of the now proposed 70 no. units has also been guided by the need for the development to function as part of the wider overall development on the subject lands.

It is considered that the development represents ‘Phase 3’ of a multi-phase approach to development on the Cornamaddy lands.

The evolution of the scheme to its final frozen design is presented below:

- **Option 1** outline design for 93 no. units. The initial concept design featured a mix of unit types of Townhouses, Duplexes, and semi-detached units which were included in the initial concept layout plan to establish the suitability of the units on the site.
- **Option 2** represents a more advanced scheme design stage than the initial concept site plan prepared for phase 1. 80 no. units were proposed at this point. At this design stage a draft of the specific unit types that would be used for the proposed development were agreed. 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, which culminated in the final frozen scheme design now as submitted, outlined in Option 3 – Chosen Option below.
- **Option 3** represents the now submitted final design of the scheme. The now submitted final design has been subject to an extensive design process and is now considered the most viable design option for the lands on individual merit and in combination with all other lodged developments and future developments on the subject lands.

It is considered that the above evolution of the scheme from option 1 through to option 2 and the chosen option 3 were not driven by environmental factors but rather by collaboration between the relevant design team members to endeavour to ensure that the proposal presents the most sustainable design option for the site.

Do Nothing Alternative

It is considered that the 'Do Nothing' Alternative of leaving the development site as greenfield lands would be contrary to Westmeath County Councils development objectives for the subject site.

Alternative Processes

Alternative processes are not considered relevant to this Environmental Impact Assessment Report given the nature of the proposed development.

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 of Projects: Guidance on the preparation of the 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 2016.

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 2016 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 Ireland's 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

The predominant household size in the Moydrum area, where the subject site is located, was 2 persons, making up 28% of the total households in the electoral division.

The predominant household size in the Glassan and Athlone East Rural electoral divisions was also 2 persons, while the predominant household size in the Athlone East Urban and Athlone West Urban electoral divisions was found to be 3 person.

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, soils and geological environment was carried out by Enviroguide Consulting for the Proposed Development Site.

The Proposed Development Site is located in Athlone, Co. Westmeath. The total Site area is 20.5 ha, the total site area for this phase of development is 10.87ha.

The Site is bound to the south by the existing Drumaconn residential estate, while the north, west and east Site boundary is greenfield. The Proposed Development Site is located North-East from Athlone town centre

The assessment was carried out taking cognisance of appropriate national guidelines and standards for Environmental Impact Assessment using data collected from a detailed desk-based studies including a review of all relevant design details pertaining to the Proposed Development, site-specific intrusive site investigation and assessment results (including trial pit excavations, borehole drilling, soil sampling, laboratory analysis of soil). This information was assessed to describe and assess the baseline conditions at the Proposed Development Site. A detailed assessment of the potential impacts was undertaken, and appropriate avoidance and mitigation measures were identified where

necessary to reduce any identified potential impact associated with the Proposed Development.

The Proposed Development comprises of amendments to permitted application WMCC reg Ref. 14/7103/ ABP Ref. PL25.244826 for the removal of 38 no. permitted units (not constructed) to be replaced by: Construction of 70 no. residential units comprising: 4 no. 2 bed terraced houses (78 sq.m), 60 no. 3 bed semidetached (96-116 sq.m) and 6 no. 4 bed semidetached houses (147 sq.m) with associated private gardens. The Proposed Development also includes The creche facility, public open spaces, landscaping, roads layouts, car parking, boundary treatment works, public lighting and all associated site works associated with the 87 no. remaining units retained as permitted under WMCC Reg Ref. 14/7103 ABP Ref. PL25.244826 will remain unchanged.

The construction Phase of the Proposed Development will require:

- Excavation of subsoil to reduce levels to construct building foundations, filter drains, surface water drainage, roads, car parking areas and all ancillary works. Preliminary cut and fill analysis outlined in the CWMP (Paul Mc Grail, 2022c) indicates the following approximate volumes will be excavated during construction.
 - Topsoil – 8,000m³
 - Sub grade material – 18,000m³

Foundation solutions will be designed to suit the ground conditions and will include raft, pad, strip or piled foundations.

The esker on Site (running in an east-west direction to the south of the Site) will be retained on Site during Construction and Operation Phase of the Development.

The Site of the Proposed Development is predominantly a greenfield undeveloped lands within an area with allocated Zoning Objectives of “Residential (Low – Medium Density)” and “Open Space”. The Proposed Development will develop land for residential use in accordance with the zone objective of Westmeath County Council Development Plan, 2005.

Suitable excavated soil will be retained and re-used at the Site for fill and landscaping for the Proposed Development in accordance with design proposals and current standards and regulations. The importation of aggregate fill materials will be required to construct the Proposed Development.

Surplus soil arising from groundworks will require off-site removal for reuse or recovery in accordance with appropriate statutory consents and approvals.

A detailed Construction Environmental Management Plan (CEMP) and Construction and Demolition Waste Management Plan (CDWMP) have been prepared to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532, CIRIA, 2001) during the works. All works during the Construction Phase of the Proposed Development will be undertaken in accordance with the requirements of the CEMP and CDWMP.

Emergency procedures will be developed by the appointed Contractor in advance of works commencing and spillage kits will be available on-site including in vehicles operating on-site. Construction staff will be familiar with emergency procedures for in the event of accidental fuel spillages. Remedial action will be immediately implemented to address any potential impacts in accordance with industry standards and legislative requirements.

There will be no excavation of soil or bedrock during the Operational Phase of the Proposed Development.

There will be no significant, adverse, long-term impacts on, or associated with the land, soils and geology attributed to 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 mainly greenfield, composed of grassland and hedgerows. An esker runs across the southern half of the site in an east-west direction. There were no obvious potential sources of contamination seen on site. The topography appears to be relatively flat with some undulations within the site. Ground permeability appears to be poor, however drainage channels or streams which run through the site were predominantly dry during the site visit. The streams on site drain 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 Chapter describes the Biodiversity of the Site of the Proposed Development and surrounding environs, with emphasis on habitats, flora, and fauna. It provides an assessment of the impacts of the Proposed Development on habitats and species, particularly those protected by national and international legislation, or considered to be of Conservation Importance; and proposes measures for the mitigation of these impacts, where appropriate.

The assessment is informed by a combination of both desk studies and field studies. A desk-based study was initially carried out to assess existing information relating to the Site's natural environment. A range of field surveys including habitat and flora surveys, mammal surveys, bat surveys and bird surveys were undertaken. All surveys were carried out using standard and/or best practice protocols. The Site is a greenfield Site and contains large areas of grassland surrounded by treelines, hedgerows and drainage ditches.

The value of the ecological resource of the Site i.e., the habitats and species present or potentially present, was determined using the ecological evaluation guidance provided in the National Roads Authority's Ecological Assessment Guidelines (NRA, 2009). Key Ecological Receptors (KERs) are those ecological features which are evaluated as Locally Important (higher value) or higher and that are likely impacted significantly by the Proposed Development. This evaluation scheme has been adapted here to assess the value of the habitats and fauna at the Site. The value of habitats on Site is assessed based on the condition, size, rarity, conservation, and legal status. The value of fauna is assessed on its biodiversity value, legal status, and conservation status. Biodiversity value is based on its national distribution, abundance or rarity, and associated trends. Using the evaluation criteria described above, the habitats and species identified as being present or potentially present were assessed. As per the NRA guidelines, impact assessment is only undertaken of KERs.

No rare or protected flora was encountered on Site. The following species were identified as KERs: bats, birds, otter (*Lutra lutra*), badger (*Meles meles*), pygmy shrew (*Sorex minutus*), hedgehog (*Erinaceus europaeus*), stoat (*Mustella erminea Hibernica*), common lizard (*Lacerta vivipara*), amphibians and fish species within Lough Ree downstream of the Site. The following habitats were identified as KERs: stone walls and other stonework (BL1), wet grassland (GS4), scrub (WS1), hedgerows (WL1), treelines (WL2), drainage ditches (FW4) and depositing/lowland rivers (FW2). This Site is noted to hold habitats that are common and widespread in the locality but are likely to be locally important to foraging, nesting, roosting and commuting species in the wider area such as birds and mammals (including bats).

Two active badger setts (a main sett and an annex sett) were recorded at the Site, several established mammal trails were also noted leading to and from the setts. The proposed works will result in the loss of the setts due to the spatial constraints at the Site. Three bat species were recorded at the Site and the Site is used as foraging and commuting habitat for local bat populations. Two trees on Site, T914 and T915 were noted as having

bat emerging during surveys. A NPWS derogation licence will be required for both T915 and T915, if justification is found for their removal.

The potential for the Proposed Development to impact on nearby protected areas is also considered in the Biodiversity Chapter. Ireland aims to conserve habitats and species through the designation of conservation areas. The Proposed Development Site itself is not designated as a Special Area of Conservation (SAC), Special Protection Area (SPA), Natural Heritage Area (NHA) or proposed Natural Heritage Area (pNHA). Potential impacts to these sites have been addressed in this chapter and in the Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) accompanying this application. The closest designated site to the Proposed Development is Lough Ree SAC, SPA and pNHA (0.9km from the Proposed Development Site). These protected sites are hydrologically connected to the Proposed Development via the Garrynafela and Kippinstown stream.

Potential impacts arising from the Construction and/or Operational Phase of the Proposed Development, in the absence of mitigation, can be summarised as follows:

- Water quality impacts to the Garrynafela and Kippinstown Stream and downstream designated sites arising from surface water run-off.
- Semi-natural habitat loss.
- Disturbance and/or mortality of fauna within the Site.
- Loss of potential commuting, foraging, nesting, roosting, and breeding habitat for birds, small mammals, amphibians and reptiles.
- Disturbance and/or mortality to badger within the Site.
- Noise and dust emissions from the Site during the Construction Phase.

Potential impacts of the Proposed Development were predicted to range from neutral to significant at the local scale only and can be readily addressed with the mitigation measures proposed. To address impacts arising from surface water discharges, a range of mitigation measures to protect surface water quality (and therefore the European sites in Lough Ree) are provided. These surface water mitigation measures will treat the source (e.g., removal of silt from surface waters via silt fences, incorporation of SuDS into the project design) or remove the pathway (e.g., no release of wastewater generated on Site into nearby drains or drainage ditches).

The loss of semi-natural habitat at the Site is addressed by retaining a portion of the Site for biodiversity (including a large area on and adjacent to the esker), including large areas of green open space in the landscape design, and incorporating tree and hedge planting and wildflower meadows into the design.

Disturbance and/or mortality of local fauna within the Site (e.g., bats, non-volant mammals, common lizard, amphibians and birds) is addressed in the Biodiversity Chapter. The mitigation measures outlined ensure that there will be no significant impact on local fauna at the Site. The mitigation measures address the source of impacts (e.g., night-time light pollution, dust, noise, vegetation clearance).

The preparation of a badger management plan by a badger specialist will ensure that badgers are protected during the Construction Phase and during sett exclusion and excavation. All exclusion works will be supervised by the badger specialist. An artificial main sett will be provided adjacent to the western Site boundary, approximately 170m of the existing main sett, as compensation for the loss of the existing setts. The artificial sett will be constructed and established prior to the exclusion of badgers from the existing setts and is linked to the existing setts by the esker. A dense section of scrub vegetation including bramble (*Rubus fruticosus*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*) will be planted within the designated artificial sett area, this planting will

provide shelter and protection for the badgers and minimise human related disturbance in the area. Wildlife friendly lighting will ensure the artificial sett is not illuminated.

Provided all mitigation measures are implemented in full and remain effective throughout the lifetime of the Proposed Development, no significant residual negative impacts on the local ecology or on any designated sites are expected from the Proposed Development. If the Proposed Development were not to go ahead, habitats at the Site would continue to naturally evolve. The treelines and hedgerows would continue to provide foraging, roosting and commuting habitat for birds, bats and mammals, the grasslands would continue to offer resources to local pollinators and the scrub habitat would persist in providing habitat for local wildlife.

9 AIR QUALITY AND CLIMATE

This chapter examines the potential for the Proposed Development to impact upon air quality and climate within the vicinity of the Proposed 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 during the Construction Phase of the Proposed Development include soil excavation works, demolition, bulk material transportation, loading and unloading, stockpiling materials, cutting and filling, and vehicular movements (HGVs and on-site machinery).

According to Transport Infrastructure Ireland guidelines (TII, 2011), it is difficult to accurately quantify dust emissions arising from construction activities. Therefore, it is not possible to easily predict changes to dust soiling rates or particulate matter (PM₁₀) concentrations. TII recommend a semi-quantitative approach to determine the likelihood of significant impact in this instance. This should also be combined with an assessment of the proposed mitigation measures. In order to account for a worst-case scenario, the Proposed Development can be considered 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 100m from the Site. There are a number of high-sensitivity receptors located within 100m of the Site boundary. Therefore, in the absence of mitigation, it is considered that there is potential for dust impacts to occur at these locations. Appropriate mitigation measures have been recommended and will be implemented at the Site in order to minimise the risk of dust emissions arising during the Construction Phase, provided such measures are adhered to, it is not considered that significant air quality impacts will occur. Furthermore, the monitoring of construction dust during the Construction Phase of the Proposed Development will be carried out to ensure that impacts are not experienced beyond the site boundary.

Construction vehicles and machinery during this phase will temporarily and intermittently generate exhaust fumes and consequently potential emissions of volatile organic compounds, nitrogen oxides, sulphur oxides, and particulate matter (dust). Dust emissions associated with vehicular movements are largely due to the resuspension of particulate materials from ground disturbance. According to the Institute of Air Quality Management (IAQM, 2014), experience from the assessment of exhaust emissions from on-site machinery and Site traffic suggests that they are unlikely to make a significant impact on local air quality, and in the vast majority of cases they will not need to be

quantitatively assessed. Air pollutants may increase marginally due to construction-related traffic and machinery from the Proposed Development; however, any such increase is not considered significant and will be well within relevant ambient air quality standards. According to TII (2011), the significance of impacts due to vehicle emissions during the Construction Phase will be dependent on the number of additional vehicle movements, the proportion of HGVs and the proximity of sensitive receptors to Site 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 not expected to result in a significant change (> 10%) in AADT flows near to sensitive receptors. Therefore, a detailed air quality assessment is not required.

There is the potential for combustion emissions from onsite machinery and traffic derived pollutants of Carbon Dioxide (CO₂) and Nitrous Oxide (N₂O) 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 (GHG) emissions will be insignificant in terms of Ireland's obligations under the Kyoto Protocol and therefore will have no considerable impact on climate. Overall, climatic impacts are considered to be short-term and imperceptible.

Operational traffic will use local roads to access the facility with potential increases of traffic flow on some roads and subsequent associated emissions of Volatile Organic Compounds (VOCs), nitrogen oxides, sulphur dioxides and increased particulate matter concentrations. Predicted levels of operational traffic as a result of the Proposed Development do not meet the indicative criteria for requiring an air quality assessment; it is therefore considered unlikely for significant air quality impacts to occur as a result of increased traffic flow, and an associated air quality assessment is not required.

A Flood Risk Assessment (FRA) was undertaken by Paul McGrail Consulting Engineers on behalf of the Client. 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 of the Proposed Development is within Zone C and is appropriate for the Proposed Development from a flood risk perspective. concluded that the Site is suitable for development and has an overall low risk of being affected by flooding.

An Energy Statement has been prepared for the Operational Phase of the Proposed Development by Morley Walsh Consulting Engineers. The report outlines a number of methodologies in Energy Efficiency, Conservation and Renewable Technologies that will be employed in part or in combination with each other for the Proposed Development. These techniques will be employed to achieve compliance with the building regulations Part L and NZEB standards currently in public consultation.

10 NOISE AND VIBRATION

Noise and vibration was considered in several aspects and their impacts are outlined as follows:

Construction phase

Existing residents will experience occasional elevated noise levels, particularly during the site preparation stages at houses adjacent to the works. Construction works will only take place during the daytime and the noise level will be kept to a minimum. As works moves from the site preparation stage, the noise levels will also diminish as large items of plant will not be required.

Operational phase

There will be a very slight increase in traffic noise from occupiers and users of the creche departing and leaving the development, particularly at busy morning and evening periods. However the noise increase is so small that it is likely to be imperceptible.

Future occupiers

The external and internal levels of noise from the N55 road are relatively low. Occupiers in some gardens may hear some road noise but not at a level to cause annoyance. Even with an open window at night, there should be no risk of sleep disturbance.

11 LANDSCAPE VISUAL IMPACT ASSESSMENT

Description

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 boundary. 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 3 development of the masterplan in Cornamaddy.

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 value.

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. There 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 Significant, 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 11 of the identified viewpoints. The proposed development is visible in viewpoint 3a and 11, where the visual effects are Slight – Not Significant and Moderate respectively. 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.

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 – 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 almost all viewpoints. The cumulative visual change is of varying significance depending on the proximity and the significance varies

from Slight to Significant. Initially adverse in some viewpoints but overall most viewpoints will experience neutral-beneficial change in the long term.

Viewpoint 11 and Viewpoint 9 are experiencing Significant cumulative visual change and would be qualitatively adverse in the short term. As landscaping proposals within the masterplan lands mature and forms part of the wider landscape, the significance is expected to 'Moderate' effects and 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 national 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 and relevant Environmental Protection Agency guidelines.

There are no recorded archaeological sites within the proposed development site and the only example (Mound barrow WM029-041----) within the surrounding 1km study area is located 715m to the north-west. In addition, the proposed development is located c.2km outside the Zone of Archaeological Potential around the historic core of Athlone town as defined in the *Athlone Town Development Plan 2014-2020*. A review of historic mapping, as well as modern aerial and LiDAR imagery, revealed no evidence for the presence of unrecorded archaeological sites within the site boundary 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, sub-surface archaeological remains within green field areas 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 sections of tree-lined field boundaries along the outer west end of the landholding which form townland boundaries between Cornamaddy and Lissywollen and Cornanagh to the west. While the linear field boundaries along the north end of the

proposed development site now form the boundary with Garrynafela to the north, these were created during the late 19th century and when the earlier curvilinear townland boundary 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. Townland boundaries are found throughout the Irish landscape and comprise undesignated features of local (low) cultural heritage value. None of the townland boundaries in the area extend into the interior of the proposed development site.

The construction and operational stages of the proposed development will have no predicted effect on the known cultural heritage resource. Ground excavation works will have the potential to result in permanent, direct, negative effects on any unrecorded sub-surface archaeological sites 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 high magnitude of effect, albeit ameliorated by the creation of a full and detailed archaeological record, the results of which shall be publicly 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.

14 TRAFFIC AND TRANSPORTATION

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 70 residential unit. The peak hour vehicular trips a with the residential development is estimated to be 42 two-way trips in the AM peak and 45 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 107 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 of the EIAR provides an assessment of the potential impacts of the Proposed Development on waste management services and infrastructure within the defined study area.

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

The preliminary Cut and Fill Analysis outlined in the Construction Waste Management Plan (CWMP) (Paul McGrail Consulting Engineers Ltd, October 2022) has indicated that approximately 8,000m³ of topsoil and 18,000m³ of sub-grade material will need to be excavated during construction. Topsoil that is required for the soft landscaping will be measured and this quantity will be retained on site. Offsite removal of surplus clean soil and topsoil will be undertaken in accordance with the CWMP, the Construction Environmental 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. 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.

There will be an increase in waste collection in the area during the Construction and Operational Phases of the Proposed Development, however, as the surrounding area is highly residential in nature, waste collection is commonplace.

The cumulative effects of Proposed Development on Material Assets have been assessed taking other planned, existing, and permitted developments in the surrounding area into account. All planning permission applications that have been granted and developed have been incorporated into the baseline assessment of this application. 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 CWMP and the Operational Waste Management Plan (OWMP) that have been prepared for the Proposed Development provide sufficient guidance to ensure that the Construction and Operational Phases of the Proposed Development will have a neutral, imperceptible to slight impact on the receiving environment in the long term.

Materials and waste generated during the Construction Phase will be carefully monitored by the Construction Environmental Site Manager, and/or an appointed Waste Officer, to

ensure compliance with relevant local authority requirements and effective implementation of the CWMP, including maintenance of waste documentation.

The implementation of the Construction Management Plan, the Construction Environmental Management Plan, the CWMP and the OWMP, in conjunction with best environmental practice and appropriate management of the Proposed Development, will ensure that there are no significant adverse impacts to waste management as a result of the Proposed Development.

15 MATERIAL ASSETS

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.