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EIAR Non-Technical Summary

PRESENTED TO

Galway City Council

Corrib Causeway Phase 1, Dyke Road

DATE

March 2025

Environmental Consultancy Services

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1 INTRODUCTION AND BACKGROUND

Introduction

This environmental impact assessment report (**EIAR**) non-technical summary has been prepared by Enviroguide Consulting on behalf of the applicant, Galway City Council (**GCC**), with the Land Development Agency acting as their agent, who are seeking planning permission from An Bord Pleanála for a primarily residential development at a Galway City Council owned site at Dyke Road, Terryland, Galway (the **Proposed Development**). The Proposed Development involves of the construction of 219 no. apartments, a childcare facility, public open space, communal open space and playgrounds.

The purpose of the non-technical summary

This non-technical summary is a requirement under the European Union Directive 2014/52/EU (the EIA Directive) for all projects that have been subject to an environmental impact assessment.

The EIAR describes the Proposed Development, the environmental impact assessment (EIA) process and summarises the likely significant environmental effects that would be caused by the development and the associated mitigation measures arising as a result of the Proposed Development.

The environmental impact assessment process

An EIAR has been carried out on behalf of GCC and the Land Development Agency based on desktop studies, site visits, surveys and site-specific investigations. The EIAR outlines any necessary mitigation and monitoring measures required to avoid, reduce or offset any potentially significant effects identified.

Following the consideration of mitigation measures, the EIAR will describe any residual effects that may occur from the Proposed Development.

The EIAR and accompanying planning application are being submitted for consideration to An Bord Pleanála, which is the Competent Authority for the Proposed Development.

The EIAR authoring team is set out in Table 1-1.

Table 1-1 EIAR Project Team

No.	Chapter	Consultant Name and address	Specialist Area
1	Introduction	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Louise Hewitt	Multidisciplinary Planning and Environmental Consultants (specializing in Environmental Impact Assessment)
2	Site Context		
3	Description of the Development		
4	Consideration of Alternatives		
5	Population and Human Health	Brock McClure Planning and Development Consultants	Planning and Development Consultants

No.	Chapter	Consultant Name and address	Specialist Area
		Vitalija Janusonyte Linda McEllin	
6	Biodiversity	Scott Cawley Ltd., 71-73 Rock Road, College House, Rock Road, Blackrock, Dublin Madeleine Van der Poel	Ecological consultancy
7	Land and Soil	Enviroguide, 3D Core C, The Plaza, Park West, D12F9TN Gareth Carroll	Multidisciplinary Planning and Environmental Consultants (specializing in impact assessment of land and soil and water)
8	Water		
9	Noise and Vibration	AONA Environmental Consulting Ltd., Unit 8A, Northwest Business Park, Sligo F91 E285 Mervyn Keegan Olivia Maguire	Environmental and Occupational Health and Safety consultancy (specialising in Air Quality and Odour Impact Assessments and Noise and Acoustic Assessments)
10	Air Quality		
11	Wind and Microclimate	Integrated Environmental Solutions Ltd, 4th Floor, Castleforbes House, Castleforbes Road, Dublin 1 Harshad Joshi	Software and consultancy company specializing in building performance analysis
12	Landscape and Visual Impact Assessment	Murray & Associates Landscape Architecture, 16 The Seapoint Building, 44-45 Clontarf Road, Dublin 3 Luciana Pinho (Verified View input from: 3D Design Bureau, Unit 1, Adelphi House, George's Street Upper, Dún Laoghaire, Dublin)	Landscape Architecture Company 3D modelling & visualisation company
13	Material Assets - Traffic and Transport	PUNCH Consulting Engineers, Carnegie House, Library Road, Dun Laoghaire, Co. Dublin Julie Tiernan	Consulting Engineers
14	Material Assets - Waste Management	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Laura Griffin	Multidisciplinary Planning and Environmental Consultants
15	Material Assets - Utilities	Homan O Brien, 89 Booterstown Ave, Blackrock, Dublin Brian Homan	Consulting Engineers
16	Cultural Heritage	Moore Group, 3 Gort na Rí Athenry, Co. Galway Declan Moore (Consultant Archaeologist)	Multi-disciplinary environmental, planning and heritage resource management consultancy

No.	Chapter	Consultant Name and address	Specialist Area
17	Interactions	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Lakshmi Priya Mohan	Multidisciplinary Planning and Environmental Consultants
18	Risk Assessment	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Louise Hewitt	Multidisciplinary Planning and Environmental Consultants
19	Summary of Mitigation Measures	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Lakshmi Priya Mohan	Multidisciplinary Planning and Environmental Consultants
20	Competent Persons Table	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Louise Hewitt	Multidisciplinary Planning and Environmental Consultants
NTS	Non-Technical Summary	Enviroguide 3D Core C, The Plaza, Park West, D12F9TN Louise Hewitt	Multidisciplinary Planning and Environmental Consultants
App	Appendices		

2 SITE CONTEXT

The Proposed Development is located on the northern edge of Galway City and lies completely within GCC jurisdiction. The Dyke Road and the River Corrib are located directly west of the site and commercial properties including the Galway Retail Park are located to the east. The University of Galway is located across the River Corrib to the west. The Terryland Forest park is also located north of the site. Please refer to Figure 2-1 below for the site location.

The Proposed Development, Phase 1 is part of the Corrib Causeway Development Framework which is an overall three phased Development Framework which will deliver a residential-led, mixed-use development.

This EIAR is assessing the Proposed Development site associated with Phase 1 of the Corrib Causeway Development Framework which has an area of 1.144 hectares and is currently in use as a public carpark. The Proposed Development site is bordered by the Phase 2 lands to the south of the site which are also in use as a public carpark. Phase 2, an existing car park south of the site, is intended to be redeveloped for civic, commercial and cultural uses. The Phase 3 lands border the north of the site and contain the Blackbox Theatre. The existing uses of the Phase 2 and 3 lands will remain operating as normal during works on the Phase 1 lands.

The site is not located in an area that is protected for ecological, architectural or archaeological purposes. The site is located within Flood Zone A which is described as having a high probability of flooding. The closest waterbodies to the site are the River Corrib and Terryland Stream which are located approximately 130m east and 210m north respectively.

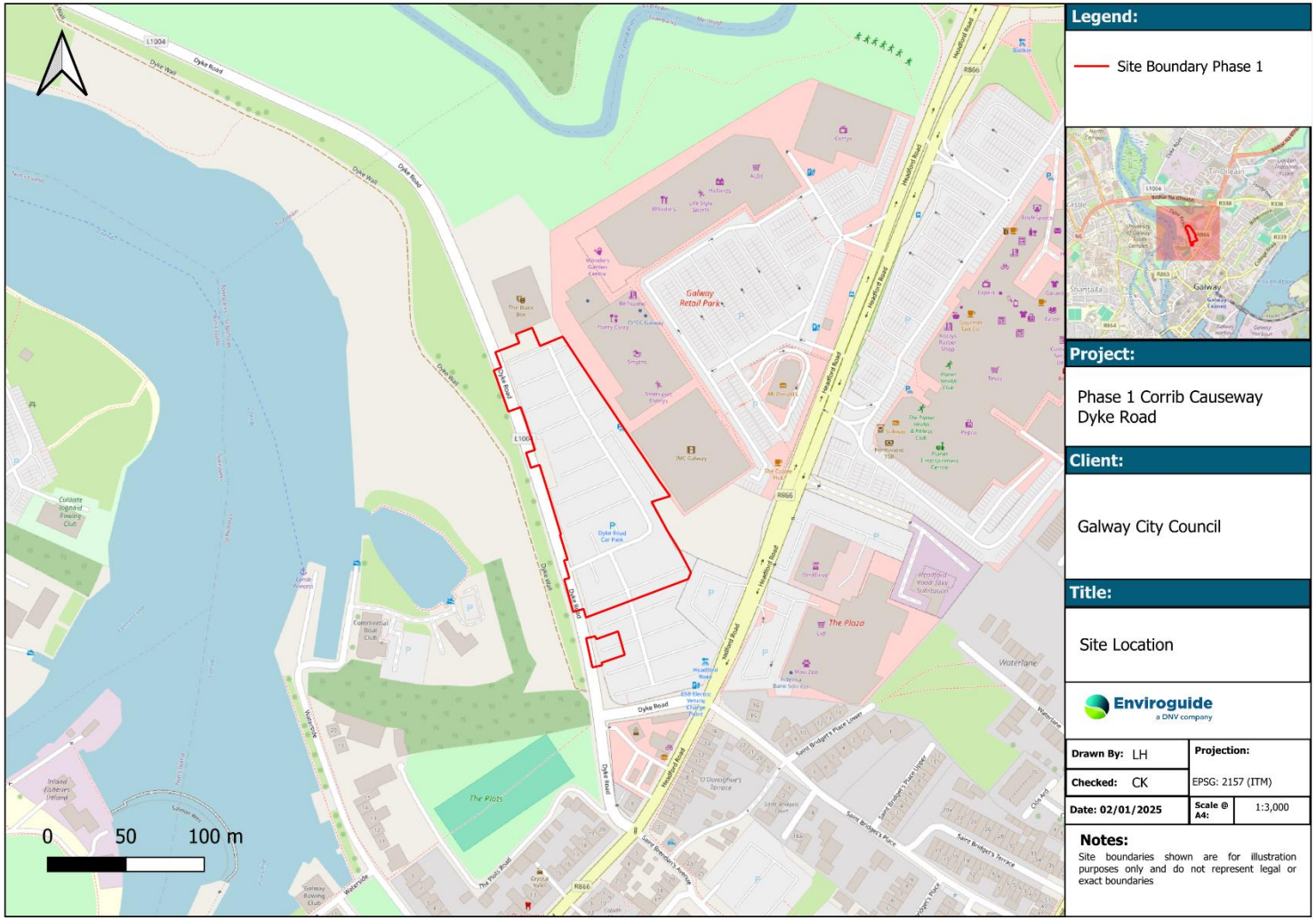

Figure 2-1 Site Location

2.1 Corrib Causeway Development Framework

The Proposed Development is part of an overall three phased Development Framework which will deliver a residential-led, mixed-use development. Phase 2, an existing car park south of the site, is intended to be redeveloped for civic, commercial and cultural uses. If the existing Black Box theatre located north of the site is relocated, there is potential for the site to be developed into an additional residential block which would be Phase 3.

The overall Corrib Causeway vision document has been subject to public consultation through a project website (https://corribcauseway.ie/). The development of a wider site has been split as follows:

- Phase 1 (the Proposed Development);
- Phase 2 (referred to as River Side Residential Neighbourhood);
- Phase 3 (referred to as the Terryland Forest Residential Neighbourhood)

It is anticipated that Phases 2 and 3 will come forward for development following submission of Phase 1 in Q1 of 2025. The total area of the Corrib Causeway Development Framework is 1.78 hectares. Please refer to Figure 2-2 for the location of all three phases of the Development Framework.

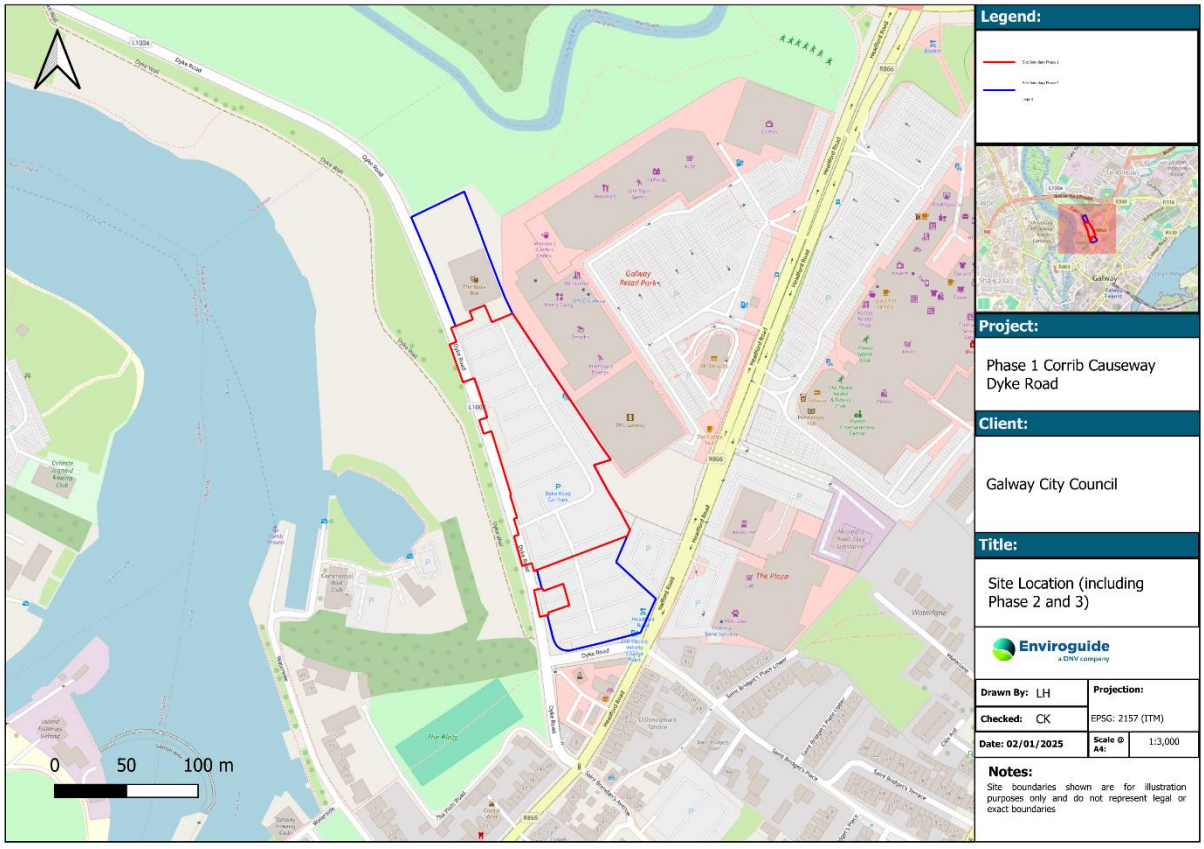

Figure 2-2 Phase 1, 2 and 3 Sites of the Corrib Causeway Development Framework

3 DESCRIPTION OF DEVELOPMENT

The Proposed Development will consist of the construction of a new residential development of 219 no. apartment units and a childcare facility (approx. 241 sq m) in the form of 1 no. new residential block (5 - 9 storeys over lower ground floor level) with associated car parking, bicycle parking, public and communal open spaces, and all ancillary works on a site area of 1.144 ha.

The Proposed Development will provide for:

a) 219 no. residential apartment units (109 no. 1-bedroom units, 100 no. 2-bedroom units and 10 no. 3-bedroom units) each with an associated private open space area in the form of a balcony/terrace.

b) A new raised pedestrian boardwalk along the western elevation of the building.

c) Open Space (approx. 2,778 sqm) is proposed in the form of (a) public open space (approx. 1,183 sqm) to the west of the proposed building fronting on to Dyke Road accommodating outdoor seating, planting, a sunken garden and pedestrian pathways and connections; and (b) communal open space (approx. 1,605 sqm) to the east of the proposed building in the form of a courtyard including outdoor seating, planting, a children's play area and outdoor sports equipment.

d) A childcare facility (approx. 241 sqm) with dedicated external play area (approx. 61 sqm) at ground floor level.

e) A total of 33 no. car parking spaces at surface level to include 2 no. accessible spaces and 2 no. set down / drop off spaces to serve the childcare facility.

f) A total of 465 no. bicycle parking spaces to include 330 no. standard residential spaces, 100 no. visitor spaces, 25 no. cargo bicycle spaces and 10 no. bicycle parking spaces dedicated for the childcare facility staff all at surface / lower ground floor level.

g) Vehicular access is proposed via Dyke Road at 2 no. locations (to the north west and south west of the site). Pedestrian and Cyclist access is also delivered throughout the site via Dyke Road and includes a pedestrian crossing at Dyke Road. Pedestrian / cyclist connections to adjoining development to the north east and south east are also delivered.

h) The proposal also provides for a further vehicular access point to the south of the main development site to facilitiate new access to the existing southern car park. A total of 12 no. of car parking spaces are removed with 161 no. car parking spaces remaining at this location.

i) 2 no. telecommunications lattice towers (overall height 6.45 m and 7.67 m) affixed to the rooftop supporting 9 no. 2m 2G/3G/4G antennas; 9 no. 0.8m 5G antennas; 6 no. 0.3m microwave transmission links; together with all associated telecommunications equipment and cabinets. The proposed overall building height including the telecommunications towers is approx. 38.18 m (+43.18 AOD).

The Proposed Development will also provide for all associated site development works, infrastructure, excavation and clearance works including decommissioning the existing Black Box Theatre waste water pumping station and providing a new pumping station complete with emergency storage, all boundary treatment, public lighting, internal roads and pathways, ESB

substations, switch room, water tank rooms, storage room, meter rooms, sprinkler tank room, parcel stores, comms room, bin storage, bicycle stores, hard and soft landscaping, play equipment, below ground attenuation tanks, nature based SUDs features, green roofs, roof plant, site services and connections for foul drainage, surface water drainage and water supply. Figure 3 1 details the proposed site layout.

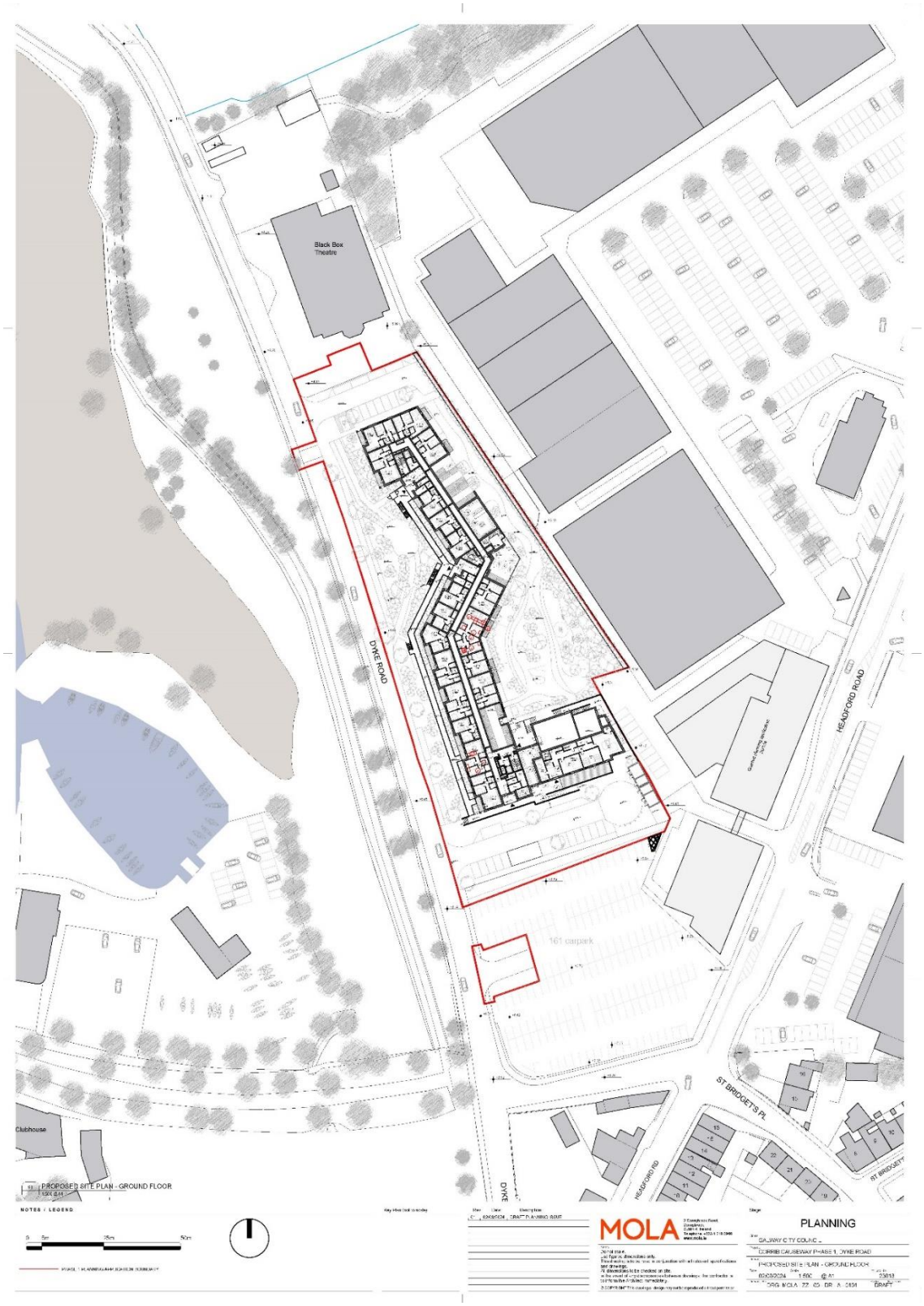

Figure 3-1 Proposed Site Layout Drawing no. DRG- MOLA - ZZ - 00 - DR - A - 0101, MOLA, 2024)

3.1 Construction of the Proposed Development

Construction of the Proposed Development will commence in Q1 of 2027, and finish Q1 2029. The construction period will take approximately 2 years.

Site development works will include stripping of existing carpark surface material and excavation of subsoil layers, construction of residential and childcare unit, construction and connection of services (surface water and SuDS, foul water, utilities) and landscaping works.

For the duration of the proposed infrastructure works, the maximum working hours will be 07:00 to 19:00 Monday to Friday (excluding bank holidays) and 08:00 to 13:00 Saturdays, subject to the restrictions imposed by the local authority. Works will not be permitted on Sundays and Public Holidays. Subject to the agreement of the local authority, out of hours working may be required for water main connections, foul drainage connections and utility connections. Where this is necessary, prior approval of Galway City Council will be sought. Deliveries will not be permitted at peak times of traffic as follows: 08:00 to 09:00,15:00 to 16:00 and 16:00 to 17:00.

A temporary construction compound will be required for the duration of the construction works. Once appointed, the main contractor will be required to submit a site layout plan which will detail the proposed location of the site compound. The compound will consist of:

- Site office and welfare facilities.
- Car parking.
- Toilets.
- Canteen area; and
- Laydown and contractor storage / stockpile / plant & fuel depot area.

The exact location and layout of the construction compound is to be confirmed in advance of commencement of the works (and agreed with Galway City Council).

4 CONSIDERATION OF ALTERNATIVES

Consideration of reasonable alternatives is an important part of the environmental impact assessment process and is necessary to evaluate the likely environmental effects of a range of development plans for the site within the restrictions in place by environmental and planning conditions.

Alternative Locations

The site has been identified in the Galway City Development Plan 2023-2029 as a regeneration and opportunity site. The Proposed Development will contribute positively to the development of the wider area and will optimise underutilised land at the site which is well serviced by infrastructure, transport and local facilities. As such, it is not considered appropriate to evaluate alternate locations within the EIAR.

Alternative Uses

The Proposed Development has been designed as part of a potential 3 phase Development Framework (the Corrib Causeway Development Framework). Phase 1 has been designed to provide residential units along with a creche facility and open landscaped space. The lack of housing supply in Ireland is a well-documented and ongoing issue. The Proposed Development incorporates the construction of 219 no. apartments which will service the demand for housing in the area. As such this is considered an appropriate use of the land.

Alternative Design and Layouts

During the design process, several versions of the site layout and alternative designs for the Proposed Development were considered following consultation with the LDA, GCC and the public. A selection process was carried out which assessed five potential site layouts and option 5, the Proposed Development, was selected as it was the best performing option in terms of urban design and residential amenity.

Alternative Process

Due to the nature of the Proposed Development i.e., residential development with amenity space and a childcare facility, where the planning application will be submitted to An Bord Pleanála, it was not considered necessary to consider alternative processes for the Proposed Development.

5 POPULATION AND HUMAN HEALTH

This Non-Technical Summary has been prepared by Brock McClure Planning & Development Consultants. Chapter 5 of this EIAR assesses any potential impacts the Proposed Development may have on Population and Human Health.

The potential effects of the Proposed Development on the local population is assessed in this EIAR in relation to population demographics; socio economic impacts; land use and social patterns; visual Impact; water quality; air quality; noise and vibration; and traffic and transport.

A desk-based study was undertaken in May 2024 and December 2024 to assess information regarding population and human health. Site visits were undertaken on 9th August 2023, 26th September 2023 and 16th October 2024 as part of this assessment. The subject site and surroundings were visited to examine the receiving environment.

A Study Area of a 1 km radius from the Subject Site location was selected comprising 8 no. District Electoral Divisions including, St. Nicholas, Menlough, Castlegar, Eyre Square, Nuns Island, Newcastle, Shantalla, Claddagh to establish the baseline population and human health status. The Study Area has a total population of 25,913 people. There is a total of 9,523 household, 34% or 3,225 of which are 2-person households and 26% or 2,427 are 1-person households. The majority of the population within the Study Area are categorised as ‘at work’ (54%).

There is a wide range of employment opportunities in various sectors within the Study Area and wider surrounding area including, but not limited to: manufacturing industries; construction; retail; information and communications technology and professional services; education and; human health.

73.3% of people within the Study Area have self-identified themselves as having ‘very good’ or ‘good’ health.

The Study Area has a wide range of social and community infrastructure facilities including further education facilities, community facilities, parks, sports clubs, healthcare, religious institutions, nursing homes and emergency services.

Construction Phase

During the construction phase of the development, there will be a neutral impact on the population trends and profile for the area. Since no additional persons will be housed on-site during construction, the overall population size and demographic characteristics will remain unchanged and the effect will be neutral, short term and imperceptible.

The construction phase of the proposed development will generate substantial employment opportunities across the various construction stages of the project and the effect will be both direct and indirect, short term positive and imperceptible.

The Construction Phase will also have likely negative effects in the form of air quality, dust, noise production, risk of accidental contamination of water sources and increased number of construction-related vehicles utilising the road network. Through standard good practice, control measures and mitigation measures identified in the relevant technical chapters,of Chapter 8 Water, Chapter 9 Noise and Vibration, Chapter 10 Air Quality and Chapter 13

Material Assets – Traffic and Transport, the effects of these disturbances will be imperceptible and will be short term for the duration of the construction phase only.

In relation to the extent of the impact of the proposed development during the construction phase, the vast majority of impacts are local and are acceptable in terms of the magnitude of impact and are temporary, as they will last only for the period of construction.

Operational Phase

The proposed development will consist of 219 no. residential units/households. Using the local average household size indicators from Census 2022 for the Study Area (2.49), this is predicted to result in providing accommodation for approximately 545.31 no. persons. This is considered significant and positive, long-term effect particularly in the context of current housing demand, while also taking account of the location's access to places of employment.

The proposed development will result in the addition of 219 no. units to the supply of housing to the Study Area. These will be a mixture of 1, 2 and 3 bedroom residential units. This is considered to be a significant and positive, long-term effect. The addition of these proposed units will contribute to the housing unit target outlined in the Galway City Development Plan 2023-2029

Given the multitude of large employment centres within close proximity to the site, the existence of significant transport infrastructure providing access to other centres it is likely that future residents of the scheme would work within close proximity to nearby employment centres. The multiplier effect arising from these additional residents using local services and purchasing goods at local businesses will also lead to an increase in employment in those businesses, which meet this demand. The overall effect on employment is direct and indirect, moderately positive and medium to long term effects.

Community amenities such as education, childcare, health and wellbeing, sports and recreation, retail, religious institutions have also been assessed and it has been established that there is sufficient capacity in the surrounding area to accommodate the future residents of the Proposed Development.

The Operational Phase will also have likely imperceptible effects on air quality, noise production, water quality and not significant associated traffic and transport impacts. Through standard good practice, control measures and mitigation measures identified in the relevant technical chapters, the effects of these disturbances will be imperceptible.

Cumulative Impacts

The cumulative impacts have been considered as part of two scenarios:

Scenario 1 – Corrib Causeway Development Framework (Proposed Development plus Phase 2 and Phase 2.

Scenario 2 – Corrib Causeway Development Framework plus cumulative schemes.

The cumulative impact assessment has thoroughly evaluated the individual and in combination effects of each scenario and each respective development.

This comprehensive assessment has determined that there will be no significant impact on the environment, provided that the mitigation measures outlined in the associated planning

documentation are effectively implemented. These mitigation measures are designed to address potential negative effects on various environmental and human health factors, ensuring that any adverse impacts are minimised.

Specifically, this chapter has concluded that there will be no significant negative impact on population and human health resulting from the Proposed Development, as well as from the combined scenarios of Cumulative Scenario 1 and Cumulative Scenario 2. The evaluation has taken into account factors such as air quality, noise, water quality, traffic, and socio-economic conditions, all of which are crucial for maintaining the health and well-being of the local population.

Mitigation and Monitoring

No specific mitigation measures are required in relation to population and human health, given the lack of direct effects resulting from the Proposed Development at both construction and operational phases. However, where required, mitigation measures in relation to air emissions, noise, traffic etc. are identified in their respective chapters in this EIA Report.

Residual effects

No specific mitigation measures have been proposed for population and human health so residual impacts will be slight positive.

6 BIODIVERSITY

This chapter of the EIAR consists of an impact appraisal of the Proposed Development under the heading of Biodiversity and has been prepared by Sorcha Shanley (Senior Consultant Ecologist) and Síofra Quigley (Senior Ecologist) and reviewed by Tim Ryle (Principal Ecologist) and Colm Clarke (Associate Director, Terrestrial Ecology) of Scott Cawley Ltd.

The assessment considered the potential direct, indirect and cumulative impacts on biodiversity within the zone of influence of the Proposed Development. 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, 2024).

Baseline ecology surveys were undertaken at the Proposed Development site between July 2023 and May 2024 and additional surveys were undertaken between January 2025 and March 2025. The following key ecological receptors were identified within or occurring within the zone of influence of the Proposed Development: badger, otter, bats, other small mammals, breeding birds, wintering birds, amphibians, Atlantic salmon, brown/sea trout, lamprey species, European eel, all other fish species, freshwater pearl mussel, marine mammals, as well as the following habitat types: grassy verges, scattered trees and parkland, reed and large sedge swamps, tall-herb swamps and wet pedunculate oak-ash woodland.

In addition, European and Nationally designated sites were identified as key ecological receptors. The Proposed Development site does not overlap with any European or nationally designated site but is adjacent to Lough Corrib SAC which is situated approximately 15m west of the site. The River Corrib, which forms part of the Lough Corrib SAC, flows along the western side of the development and discharges to Inner Galway Bay SPA and Galway Bay SAC approximately 700m downstream from the Proposed Development. There is no direct surface water hydrological link between the Proposed Development site and Lough Corrib SAC, however surface water drains from the site into the River Corrib and downstream European sites. The Natura Impact Statement accompanying this application (Scott Cawley Ltd., 2024b), concluded that with the implementation of the mitigation measures outlined, no significant effects on any European sites, whether arising from the Proposed Development alone or in combination with other plans and projects, will occur. In reaching this conclusion, the nature of the project and its potential relationship with all European sites within the Zone of Influence, and their conservation objectives, have been fully considered.

Construction Phase

Potential impacts arising from the Proposed Development during the construction phase are considered to be accidental pollution event affecting surface water quality in the receiving environment, water quality impacts on otter, wintering birds, fish species, freshwater pearl mussel and marine mammals, habitat degradation as a result of changes to the hydrogeological regime, habitat degradation as a result of air quality impacts, direct mortality/injury to potential nesting birds during site clearance works and disturbance and displacement of otter.

Operational Phase

Potential impacts arising from the Proposed Development during the operation phase are considered to be accidental pollution event affecting surface water quality in receiving environment and water quality impacts on fauna species.

Mitigation and Monitoring

A comprehensive suite of mitigation measures is proposed for the Proposed Development. All mitigation measures will be implemented in full and are best practice, tried and tested, effective control measures to protect biodiversity and the receiving environment.

Residual effects

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 significant effects on designated sites, or any long-term significant effects on key ecological receptors identified. Therefore, there are no likely significant residual effects on biodiversity as a result of the Proposed Development.

7 LAND AND SOIL

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

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, the results of the ground investigation undertaken by Ground Investigations Ireland (GII), a site walkover survey and review of all relevant drawings and documents pertaining to the site and the Proposed Development. A detailed assessment of the potential impacts was undertaken, and appropriate avoidance and mitigation measures were identified to reduce any identified potential impact associated with the Proposed Development.

The Construction Phase of the Proposed Development will include the excavation of 4,502m^3 of soil and subsoil for the construction of building foundations, drainage and infrastructure. Where possible, it is intended to reuse suitable excavated soil and subsoil for landscaping and engineering use. However, where required, surplus materials will require removal offsite in accordance with all statutory legislation.

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

During the Construction Phase, all works will be undertaken in accordance with the Outline Construction Environmental Management Plan (CEMP) (AECOM, 2024b) and the Outline Resource and Waste Management Plan (RWMP) (AECOM, 2024c). Following appointment, the contractor will be required to further develop the CEMP and RWMP to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground and surface water with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532', CIRIA, 2001). The CEMP and RWMP 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, Subsoils and Stockpiles;
- Management and Control Procedures for the Exportation of Surplus Soils and Subsoils;
- Management and Control Procedures for the Importation of Aggregates and Materials;
- Control and Handling of Cementitious Materials;
- Control and Handling of Fuel and Hazardous Materials; and
- Accidental Release of Contaminants.

There will be no excavation of soil or bedrock or infilling of waste during the Operational Phase of the Proposed Development as a mixed use residential and retail/commercial development.

There will be a land take effect of approximately 1.144Ha for the construction of the Proposed Development and the land use at the site will change from a public surface car park to mixed

use residential and retail/commercial land use with associated vehicular and pedestrian access, car parking landscaping.

The excavation of made ground including some soils impacted with low levels of anthropogenic contamination (i.e., PAH's (polycyclic aromatic hydrocarbons) and petroleum hydrocarbons) and permanent removal off-site will have an overall positive impact on the quality of shallow soils underlying the site.

Overall, there will be no significant adverse impacts on, or associated with the land, soils and geology attributed to the Proposed Development.

8 WATER

An assessment of the potential impacts on the existing hydrological and hydrological environmental was carried out by Enviroguide Consulting.

The assessment was carried out taking consideration of appropriate national guidelines and standard for the Environmental Impact Assessment using data collected from detailed desk study, the results of the ground investigations 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 site. A detailed assessment of the potential impacts was undertaken, and appropriate avoidance and mitigation measures were identified to reduce any identified potential impact associated with the Proposed Development.

The Site is mapped by the EPA (EPA, 2025) as within the Corrib WFD Catchment (Catchment I.D.: 30), the Corrib_SC_010 WFD Sub-catchment (Sub-catchment I.D.: 30_18) and the Terryland_010 WFD River Sub-Basin (River Waterbody Code: IE_WE_30T010500). The closest surface water feature is recorded on the EPA database (EPA, 2025) as the Terryland Stream (River Waterbody Code: IE_WE_30T010500), which is located approximately 0.13km north of the Site at its closest point. The Terryland stream is connected to the River Corrib where it can either discharge to or receive flow from depending on baseflow conditions. The Corrib River flows south before discharging to the Corrib Estuary transitional waterbody (EU Code: IE_WE_170_0700) approximately 0.99km southwest of the Site at its closest point. The Corrib Estuary ultimately discharges to the Inner Galway Bay North coastal waterbody (EU Code: IE_WE_170_0000) located approximately 3.32km southeast of the Site at its closest point. The EPA (EPA, 2025 maps the groundwater body (GWB) beneath the Site as the Clare-Corrib GWB (EU Code: IE_WE_G_0020). The Clare-Corrib GWB covers some 642 km2 and occupies an area across Co. Galway, Co. Mayo and Co. Roscommon (GSI, 2025).

As documented in the Infrastructure Report (AECOM, 2025), the proposed surface water drainage network, which will accommodate surface water runoff from impermeable surfaces in the Proposed Development (including roadways, roofs, and parking areas), will be managed in accordance with the policy requirements of Galway City Council Development Plan 2023-2029 and the principles and objectives of Sustainable Drainage Systems (SuDS) and the Greater Dublin Strategic Drainage Study (GDSDS) to treat and attenuate surface water prior to discharging offsite to the Terryland stream.

As documented in the Infrastructure Report (AECOM, 2025), the UE Confirmation of Feasibility (CoF) letter dated the 23rd of May 2024 states that the proposed foul water connection is feasible subject to upgrades. It is proposed to relay the gravity foul sewer serving the Black Box Theatre and install a new gravity sewer network to serve the development. The existing wastewater pumping station (WWPS) that serves the Black Box Theatre is to be decommissioned and a new WWPS constructed (AECOM, 2025). A Statement of Design Acceptance (SoDA) has subsequently been issued by UE (AECOM, 2024). It is understood that foul water from the Proposed Development will be treated in the Galway Wastewater Treatment Plant (WWTP) (Discharge Licence No. D0050-01) before ultimately discharging to the Corrib Estuary transitional waterbody (EU Code: IE_WE_170_0700).

As documented in the Infrastructure Report (AECOM, 2025), it is proposed to take a connection off the existing 300mm watermain on the Headford Road. The new watermain will pass through the Phase 2 lands and loop around all 4 sides of the Proposed Development (i.e., Phase 1). The UE Confirmation of Feasibility (CoF) letter dated the 23rd of May 2024 states that the proposed water supply connection is feasible without infrastructure upgrade from UE. A SoDA has subsequently been issued by UE (AECOM, 2024).

During the Construction Phase, all works will be undertaken in accordance with the Outline Construction Environmental Management Plan (CEMP) (AECOM, 2025) and the Outline Resource and Waste Management Plan (RWMP) (AECOM, 2025). Following appointment, the contractor will be required to further develop the CEMP and RWMP to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground and surface water with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532', CIRIA, 2001). The CEMP and RWMP 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. These measures will address the main activities of potential impact which include:

- Control and Management of surface water runoff.
- Control and management of shallow groundwater during excavation and dewatering.
- Management and control of soil and materials.
- Appropriate fuel and chemical handling, transport and storage.
- Management of accidental release of contaminants at the site.
- Control and handling of cementitious materials.

During the Operational Phase ongoing regular maintenance of the proposed drainage including the sustainable drainage systems measures in accordance with CIRIA SuDS Manual C753 will be incorporated into the overall management strategy for the Proposed Development.

The SSFRA (AECOM, 2025) demonstrates that the flood risks to the proposed development can be adequately managed through the implementation of appropriate mitigation measures and adherence to the guidelines set out in the Galway City Council Development Plan and the Planning System and Flood Risk Management Guidelines. The proposed development will not adversely impact flood risk in the surrounding areas, and the inclusion of flood compensatory storage and sustainable drainage systems will ensure that the flood risk to the development and adjacent properties is minimised.

Overall, there will be no impact to the existing Water Framework Directive Status of water bodies associated with the Proposed Development including the Terryland Stream, the Corrib River and Estuary, Galway Bay, Clare – Corrib groundwater body as a result of the Proposed Development taking account of design avoidance and mitigation measures where required.

9 NOISE AND VIBRATION

Introduction

In terms of potential noise and vibration impacts, the Proposed Development has the potential to give rise to noise and vibration impacts during the Construction Phase. During the Operational Phase, there is the potential for noise impact due to road traffic movements and associated plant and equipment. There is also the potential for an inward noise impact on future residents within the Proposed Development due to future predicted traffic volumes on the surrounding road network.

This noise and vibration impact assessment has been prepared by Mervyn Keegan who is a director of AONA Environmental Consulting Ltd. AONA Environmental Consulting Ltd. specialises in the provision of expertise in noise control and acoustics and air quality and odour consultancy, including impact assessment and mitigation design.

Study Methodology

The noise and vibration impact assessment has been undertaken with reference to the most relevant and current guidance documents relating to this chapter of the EIAR.

Road traffic noise impact predictions were undertaken using the CadnaA noise prediction modelling software. A 'Building Evaluation' for each floor level on each façade of the Proposed Development has been assessed and used to deliver individual building noise maps showing noise levels along all facades. This information has been used at detailed design stage to determine the level of noise attenuation that will be required for specific glazing and ventilation attenuation requirements on each building façade.

Existing Environment

A continuous 24-hour daytime and night-time baseline noise monitoring survey was undertaken from 11th – 12th June 2024 to record existing noise levels at the site. A short-term daytime noise survey was also undertaken on 12th June 2024 to record existing noise levels along the eastern boundary of the site to assess if the existing cinema and commercial / retail buildings cause a noticeable noise impact in proximity to the proposed residential units and outdoor amenity area.

The noise environment in the area is predominantly influenced by traffic noise on the Headford Road and Dyke Road during daytime and night-time. The existing car park traffic movements also influence noise levels in the immediate area of the site.

Based on the Professional Practice Guidance (ProPG) recommended Noise Risk Categories for new developments near existing noise sources, the noise level recorded at a location representative of the proposed façade of the residential apartment development facing the Headford Road and Dyke Road, indicates the site is in the Low-Medium Risk Category during daytime and night-time.

Construction Phase

The potential noise effects at the nearest residential receptors during the construction phase will include site clearance works such as demolition, excavations, foundation works and spoil movements associated with the construction of the proposed apartment building, and construction traffic movements associated with excavation and construction works as well as

those associated with the delivery of plant, equipment and materials. Worst-case construction noise levels at noise sensitive receptors in the area of the Proposed Development have been predicted. The predicted noise levels demonstrate that it will be possible to comply with current best practice guidance and suggested construction noise limits. The predicted worst-case construction noise levels are expected to occur for only short periods of time. With the construction mitigation measures, construction noise levels will be lower than these levels for the majority of the time at the majority of properties in the vicinity of the Proposed Development. All construction works will take place during daytime hours and so the relative construction noise impact will not be significant.

Operational Phase

The traffic flows on the surrounding road network and car park area will continue to dominate the noise climate in the area of the Proposed Development. As there will be no significant increase in the number of cars on the surrounding road network, entering and exiting the site, there will be a negligible change in traffic noise levels from moving cars and vehicles in comparison to the existing scenario. In terms of the assessment of changes in traffic noise level with the Proposed Development in operation, the development will have a negligible, long-term traffic noise impact.

The daytime and night-time 'Building Evaluation' noise prediction results show that traffic noise levels on the façade of the proposed residential units that do not directly face on to the Dyke Road and Headford Road, will require no specific acoustic glazing design on these façades. Standard modern double glazing will suffice on these façade locations.

The calculated sound reduction (R_W) values indicate that the windows in the proposed residential units facing directly on to Dyke Road will require a slightly higher than standard double-glazing specification. The apartments facing directly on to Headford Road will require a standard double-glazing specification. Also, a partially open window cannot be relied upon for ventilation purposes and acoustically attenuated ventilation will be required on the façade facing directly onto Dyke Road and Headford Road.

The Proposed Development includes a variety of electrical and mechanical plant to service the development, which will be housed both internally and on the roof of the building. The building services plant items required to serve the Proposed Development will be designed and suitably located so that there is no negative impact on sensitive receivers within the Proposed Development or on nearby sensitive receptors.

Residual Impacts

The degree of environmental change in terms of noise and vibration that will occur, taking account of the proposed mitigation measures, will be insignificant on the future residents of the Proposed Development and the existing residential receivers located approximately 130m to southeast at junction of Headford Road and St. Brigid's Place.

10 AIR QUALITY

Introduction

In terms of potential air quality impacts, the Proposed Development has the potential to give rise to construction dust during the construction phase and during the operational phase of the Proposed Development, there is the potential for air quality impacts due to associated road traffic movements and space heating emissions.

This air quality impact assessment has been prepared by Olivia Maguire, a senior consultant, and Mervyn Keegan who is a director of AONA Environmental Consulting Ltd. AONA Environmental Consulting Ltd. specialises in the provision of expertise in noise control and acoustics and air quality and odour consultancy, including impact assessment and mitigation design.

Study Methodology

This assessment has been undertaken with reference to the statutory ambient air quality standards in Ireland as outlined in S.I. No. 739/2022 Ambient Air Quality Standards Regulations 2022 and the 2021 update of the World Health Organisation (WHO) air quality guidelines.

The air quality impact assessment has been undertaken with reference to the most relevant and current guidance documents relating to this chapter of the EIAR.

The background air quality in the area of the Proposed Development is of good quality and the site is located in ‘Zone C’ as denoted by the Environmental Protection Agency (EPA).

Construction Phase

The potential construction phase impacts have been assessed in accordance with the Institute of Air Quality Management Guidance on the Assessment of Dust from Demolition and Construction. The type of activities that could cause fugitive dust emissions are earthworks, handling and disposal of spoil, wind-blown particulate material from stockpiles, handling of loose construction materials, and movement of vehicles, both on and off site. The main effect of any dust emissions, if not mitigated, could be annoyance due to soiling of surfaces, particularly windows, cars and laundry.

The potential construction phase impact assessment has assessed the risk of dust impacts, including the potential dust emission magnitude, the sensitivity of the area, and the risk of impacts. Site-specific construction phase mitigation measures have been outlined and it has been determined that with the implementation of good practise control measures, dust deposition will not give rise to significant adverse effects. Mitigation measures proposed are:

- Undertake daily on-site and off-site inspections, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked;
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked;

- Increase the frequency of inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

Operational Phase

The rationale for describing the impact of the Proposed Development is derived from the Environmental Protection UK and Institute of Air Quality Management guidance "*Land-Use Planning & Development Control: Planning for Air Quality*". This is a two-stage process involving a qualitative and/or quantitative description of the impacts on local air quality arising from the Proposed Development, and a judgement on the overall significance of the effects of any impacts.

The operational phase assessment focused on the change in distribution of road vehicles and the likely effects of these changes on local air quality predicted to occur in the study area due to altered traffic flows on account of the operation of the Proposed Development. The sensitive residential receptors considered as part of the air quality assessment are the future residents of the Proposed Development and sensitive receptors in close proximity to the site. The potential impact on the Lough Corrib Special Area of Conservation was also assessed in terms of nitrogen oxides concentrations and nitrogen deposition rates

The predicted nitrogen dioxide (NO_2) and Particulate Matter (PM_{10}) concentrations have been compared with the relevant Air Quality Standards Regulations limit values. The results of the Design Manual for Roads and Bridges (DMRB) Screening Method and subsequent Air Quality Impact Assessment for NO_2 and PM_{10} indicate that there will not be an exceedance of the relevant Air Quality Limit Values for NO_2 and PM_{10} at the Proposed Development. The results of the DMRB Screening Method and subsequent Air Quality Impact Assessment indicate that there will be a negligible impact on air quality in the vicinity of the Proposed Development due to associated traffic flows. Existing residents in the area and future development residents will not experience a significant air quality impact.

Lough Corrib Special Area of Conservation (SAC) is located approximately 18m west of the redline site boundary. The Transport Infrastructure Ireland (TII) guidelines state that as the potential impact of a development is limited to a local level, detailed consideration need only be given to roads where there is a significant change to traffic flows (>5%) and the designated / ecologically sensitive site is located within 200m of the road centre line. The predicted annual average daily traffic (AADT) traffic flows on Dyke Road and the Headford Road with the Proposed Development do not increase by more than 5%. Therefore, an assessment of traffic emissions on the designated / ecologically sensitive site is not required.

There is no requirement for mitigation measures relating to the operational phase.

Residual Impacts

When the dust minimisation measures detailed in the mitigation section of this chapter are implemented, residual fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors. Therefore, the overall impact of the construction phase is considered short-term, negative and not significant.

In relation to air quality during operational phase of the Proposed Development, compliance will be maintained with all relevant ambient air quality standards and guideline values and thus the impact of the Proposed Development is not significant in the long term.

11 WIND AND MICROCLIMATE

Introduction

IES Consulting have undertaken an analysis to study the impact from wind around the Proposed Development. The analysis was carried out for the assessment scenario 1 (the Proposed Development) as shown in Figure 11-1.

Figure 11-1 View of the site: Proposed development: Phase 1 (indicated in blue)

The analysis was also carried out for the assessment scenario 1 (the Proposed Development Phase 1 plus Phase 2 and Phase 3 of the Corrib Causeway Development Framework) as shown in Figure 11-2.

Figure 11-2 View of the site: Proposed development: Phase 1 plus Phase 2 and Phase 3

The study was carried out to understand the suitability of external comfort to ensure the amenity spaces are optimally designed and located to maximise their function throughout the year, which includes alleviating the effects of flow around nearby buildings. This chapter was prepared by IES (Harshad Joshi, BE (Mech.) MS (Mech. and Aerospace), CFD Consultancy Manager).

Methodology

The analysis used the Lawson's Pedestrian Comfort and Safety criteria to test the suitability of the various locations on the site for their purposes. The criteria look at activities in terms of 'sitting', 'standing', 'leisure walking' and 'business walking'. The first two categories are aimed at locations like amenity spaces like balconies, terraces, gardens and outdoor seating areas of hospitality venues. The latter criteria are applied to courtyard pathways, exercise tracks, and thoroughfare paths for accessing various buildings on the site. These various criteria suggest that the site be designed in such a way that the wind is not allowed to reach speed exceeding about 4m/s for 'sitting' to 10m/s for 'business walking', for more than 95% of the year.

The safety criteria tests the possibility of local winds exceeding 15m/s and 20m/s, where the winds can start affecting people remaining standing. The lower speed threshold of 15m/s applies to children and the infirm. The upper speed threshold of 20m/s is for general population.

Baseline Environment

Galway exhibits predominantly south-westerly and westerly winds. The median wind speed for Galway is around 5m/s, i.e. for 50% of the year wind speed exceeds 5m/s. Therefore, from outset the challenge, from wind comfort point of view, is to reduce wind speeds in amenity spaces to one tenth of their frequency of the occurrence of over 5m/s.

Construction Phase

The simulation for the construction phase was not carried out. Typically, 2m to 3m high hoardings will be installed around the site while construction works are going on. These hoardings are likely to obstruct the wind to protect the workers form any adverse effects of winds at ground level.

Operational Phase

No adverse effects with respect to all pedestrian activities for sitting and standing are observed on:

- Balcony spaces
- Public open spaces
- Courtyard
- Creche play spaces

No adverse effects with respect to all pedestrian activities for walking are observed on:

- Building Entrances
- Boardwalk
- Public open spaces
- Courtyard

- Creche play areas

There is no exceedance of the criterion for sensitive pedestrian safety and the normal pedestrian safety are observed throughout the site.

Mitigation and Monitoring

There is no further mitigation measures recommended for the construction phase. Established construction practices are likely to ensure wind comfort the site workers.

No mitigation measures are recommended for the operational phase. The mitigation measures required for the operational phase have already been incorporated in the design of the Proposed Development. These incorporated mitigation features include the location of courtyards, public open space, creche play area, boardwalk, building entrances and the layout of trees and vegetation along various paths.

No further mitigation measures are required.

Residual effects

There are no significant long-term residual impacts on the Proposed Development.

12 THE LANDSCAPE

The site of the Proposed Development is located on Dyke Road, north of Galway city centre and near the River Corrib. Currently, the site consists of a parking area known as Dyke Road Car Park and is bordered by Smyths Toys Superstores and IMC Cinema Galway to the northeast, Dyke Road to the west, and the Black Box Theatre to the north.

The site is set within an urban context, with the River Corrib and Terryland Forest Park nearby. The site is part of an area identified by Galway City Council as a regeneration site.

At present, the site has low visual quality, dominated by a car park asphalt and block paving, with no significant trees or hedges on-site. The commercial units at the northern and eastern boundaries have an industrial appearance, further detracting from the overall visual quality. Views of the River Corrib are blocked by existing vegetation along Dyke Road.

During the construction phase, the landscape and visual impacts will be predominantly negative for all viewers. These impacts will be especially significant for those closest to the development, who will experience substantial changes in their immediate environment. These areas will face notable disruption as their existing views become dominated by construction activities, including machinery such as cranes and site hoarding. However, given the existing low quality of the landscape, the level of impact is generally low.

Upon completion, the development will permanently transform the site from a car park to a residential area with new public spaces. The development will significantly change the landscape character of the site. However, as the proposed development is considered an improvement in landscape and visual terms compared to the existing site, it will result in a positive or neutral effect in views from the city and surrounding areas.

The completed development will enhance the visual quality of the area. The introduction of green spaces, trees, and biodiverse planting will improve the overall landscape, replacing the existing car park with a more attractive urban environment. The new public open space, pedestrian links, and elevated views of the River Corrib are all expected to have a positive effect on the city’s landscape in terms of amenity, permeability, and placemaking.

In summary, the assessment found that the proposed development will result in a significant but positive change to the landscape, leading to substantial alterations in its appearance and visual characteristics. The primary changes will occur as the site transitions from a car park to a residential development, in alignment with the current development plan. Additionally, the assessment concluded that there will be no significant adverse effects resulting from the proposal. The following mitigation measures are recommended:

- A suitably qualified archaeologist is appointed to monitor initial groundworks/site investigation works ;
- A suitably qualified archaeologist is appointed to advise the design team on archaeological matters, liaise with relevant authorities, prepare an archaeological licence application and method statement, and complete the archaeological monitoring work.
- Adequte funds to cover excavation, post-excavation analysis, and any testing or conservation work rquire should be made available if required.

13 TRAFFIC

The purpose of this chapter is to assess the impact of the Proposed Development on the surrounding road network and transport infrastructure (including pedestrian, cycling and transport facilities) on the Dyke Road and in Galway City.

Site visits and traffic assessment scoping with Galway City Council were undertaken. The assessment is based on the Traffic and Transport Assessment, Outline Mobility Management Plan and Public Transport Capacity Assessment Report as well as the current relevant guidance documents.

Traffic and car parking surveys were undertaken on the surrounding road network. A Quality Audit (including a Stage 1 Road Safety Audit) was also completed.

The chapter was prepared by Julie Tiernan BE (Civil) (Hons) MSc CEng MIEI of PUNCH Consulting Engineers.

Construction Phase

Construction traffic travelling to the site will use the Dyke Road for access. The dominant traffic route will be via the N6/Headford Road to Dyke Road.

The traffic volume associated with the construction phase is not considered to be excessive and will be spread out over the duration of the construction phase.

There will be a neutral short-term slight impact to local traffic during the construction phase.

Operational Phase

The city centre location of the site supports sustainable transport usage and will therefore not generate high levels of vehicular traffic in the area.

The removal of the existing public car park will also reduce the number of existing cars accessing the Proposed Development site.

Overall, at operational phase, there is likely to be a long-term positive impact on the surrounding roads as a result of the Proposed Development.

Mitigation and Monitoring

The following are recommended mitigation measures:

- The appointed contractor will prepare a Construction Transport Management Plan (CTMP) prior to the commencement of development. The contractor will be obliged to appoint a traffic liaison officer/traffic manager. Construction vehicle movements will be minimised;
- The design and construction of the built services in accordance with the relevant guidelines and codes of practice will mitigate any potential impacts during the operational phase of the development.

The design and construction of the built services in accordance with the relevant guidelines and codes of practice will mitigate any potential impacts during the operational.

Residual effects

There will be no residual impacts on the surrounding traffic and transportation during the construction phase. Residual impacts on the surrounding roads and traffic during the operational phase are considered to be a long-term neutral not significant impact.

14 MATERIAL ASSETS : WASTE

This chapter provides an assessment of the potential impacts of the Proposed Development on waste management services. This chapter was prepared by Laura Griffin, Environmental Consultant, Enviroguide Consulting Ltd.

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;
- Reuse: Re-using 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; and
- Disposal: Where disposal of waste is unavoidable, this will be undertaken in accordance with the Waste Management Act 1996, as amended.

Construction Phase

The construction phase will give rise to the requirement to remove and bring quantities of various materials to and from the site. Construction and excavation related wastes will be created during the construction phase. This has the potential to impact on the local waste management network.

An outline Construction Environmental Management Plan (CEMP) and an outline Resource Waste Management Plan (RWMP) have been prepared by AECOM Ireland Limited for the construction phase. The materials generated during construction, such as carpark surfacing materials and excavated soil, will be segregated according to waste management policies.

Reusable soil will be retained on-site, where practical, for soft landscaping and backfilling. A record of the volumes and reuse requirements will be maintained by the contractor, once appointed, as part of their RWMP. Material that cannot be reused on site will be transferred to a materials recovery facility by a fully licensed waste contractor where the waste will be further sorted into individual waste streams for recycling, recovery or disposal.

Waste soil and material intended for offsite disposal, recycling or recovery will not be removed from the site prior to appropriate waste classification and receiving written confirmation of acceptance from the selected waste receiving facility. The offsite reuse of material will be prioritised to minimise the potential loss of valuable good quality soil and subsoil to landfill as a waste. The reuse 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 reuse 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 separate statutory consent processes.

The principal contractor will prepare a project-specific excavated management plan as part of their resource waste management plan.

Operational Phase

The operational phase will result in an increase in the production of municipal waste and increase demand on waste collectors and treatment facilities. However, this is commonplace in an urban area. An Operational Waste and Services Management Plan has been prepared by AECOM (2024). This plan details the waste segregation and storage capacity requirements, as well as the plan which will be adopted to manage the residential and commercial waste arising from the Proposed Development, once operational. The Operational Waste and Services Management Plan has reviewed relevant policy alongside best practice guidance and recommendations for sustainable waste and recycling management arrangements for the Proposed Development.

Cumulative Impact

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.

Residual Effects

The implementation of the waste management plans, in conjunction with best environmental practice and appropriate management of the Proposed Development, will ensure that there are no likely significant adverse effects to waste management as a result of the construction and operational phases of the Proposed Development. The residual effects on waste management during the construction phase are considered to be minor, negative and short-term and neutral and imperceptible in the long-term for the operational phase.

15 MATERIAL ASSETS : UTILITIES

Utilities Part A

This material assets (Utilities) assessment has addressed the likely effects on existing material assets (Utilities) of the Proposed Development as described in Chapter 3 during the demolition, construction, and operational phases. Material assets comprise the physical resources in the environment, which may be of human or natural origin. Material assets (Utilities) in the vicinity of the Proposed Development comprise of built services and infrastructure such as surface water drainage, water supply infrastructure, and foul water drainage. Other material assets include telecommunications, electricity, gas as included in Utilities Part B, and traffic and transport which have been addressed in separate chapters. Further, material assets of a natural origin are dealt with comprehensively within the other chapters of the Environmental Impact Assessment Report (EIAR).

Impact Assessment and Mitigation Measures

- The risk of potential significant impacts occurring during the construction and operational phases have been assessed and appropriate mitigation measures and/or monitoring have been proposed. The following are recommended mitigation measures:

- During the construction of the new sewers, surface water networks and associated structures arising from the Proposed Development will continue to discharge to the respective existing networks. Surface water collected will be treated by sedimentation prior to discharge to the existing surface water sewer. Total Suspended Solids (TSS) and colour will be monitored daily by a handheld multi parameter sonde.

- Maintain and monitor the performance of the surface water drainage network throughout the construction of the Proposed Development.

- Cover all temporary stockpiles generated during construction to minimise run-off.

- Locate spoil and temporary stockpiles in locations which are at least 15 m from drainage systems.

- Neither ground water or surface water runoff from the working areas will be permitted to discharge directly to the Terryland River or Corrib River. Run off generated within the site during construction will be filtered and treated to remove hydrocarbons and sediment. Total Suspended Solids (TSS), pH/EC and colour will be monitored daily by a handheld multi parameter sonde. In the event of surface water failing to meet the required standards, as set out in the discharge licence, water will be recirculated to the inlet of the sediment pond to provide further time for settlement. A penstock will be provided on the outlet from the sediment pond to control discharge from the site.

- Avoid direct or indirect discharges of untreated surface or ground water generated during the Proposed Development, to any surface water.

- Dewater all working areas at the end of each working day, if necessary, using pumping and transport of water off site in tankers if volumes prevent effective treatment prior to discharge.
- Where the Contractor utilises pumping to drain works areas, a backup pump and generator must be provided on site for use in the event of the primary pump failing.
- Use wheel washers and dust suppression on site roads (to be captured within the proposed SUDS system) and undertake daily plant maintenance checks and corrective actions where required.
- Establish contingency measures to cater for impacts to unknown services underlying the construction site (for example, old sewers or culverts).
- Identify whether shallow groundwater monitoring wells on site will be maintained and protected during construction works; decommissioned; or removed completely as part of excavation works, to prevent them from acting as direct pathways for contamination to enter the groundwater body beneath the site.
- Ready mixed concrete will be brought to the Proposed Development site by truck.
- The pouring of concrete shall take place within a designated area to prevent concrete runoff into the soil/ground water media.
- Washout of concrete transporting vehicles shall take place at an appropriate facility, offsite or where onsite wash out will be captured, for disposal off-site.
- The water system will be metered to determine water consumption and facilitate leakage detection.
- A Class I Bypass Hydrocarbon Separator to remove hydrocarbons which may be suspended in runoff. To minimise sediment, build up within the storm water drainage network, trapped inlets will be used at all points of entry and key manholes will have sumps to collect material. A regular maintenance regime, including monitoring, will be put in place to remove any excess build-up of material.

Subject to the implementation of the various construction phase mitigation measures and/or monitoring recommended in Chapter 15 of the EIAR, the Proposed Development is not anticipated to have any significant adverse impacts on surface water discharge, foul water discharge, potable water supply.

Surface/Storm Water Drainage Infrastructure

It is proposed to provide a separate surface water drainage network within the Proposed Development which will discharge into the existing 525mm Ø surface water concrete pipe where the associated surface water run-off discharges into the Terryland River through the existing outfall. The proposed network will include attenuation and treatment of surface water run-off generated within the Proposed Development. Further, the surface water drainage network has been designed to convey run-off associated with a 1 in 5-year return period event without surcharge and a 1 in 100-year return period event without flooding.

Foul Drainage Infrastructure

It is proposed to relay the gravity foul sewer serving the Black Box Theatre and install a new gravity sewer network to serve the Proposed Development. The existing wastewater pumping station (WWPS) that serves the Black Box Theatre is to be decommissioned and a new WWPS constructed. An emergency tank with 24-hour storage capacity has been provided to serve Phase 1 development and the Black Box Theatre. The existing 150mm rising main serving the existing wastewater pumping station is to be retained and reused. Uisce Éireann have confirmed that a 20m upgrade of a 150mm diameter sewer from Dyke Road to Wood Quay will be required. These works will be undertaken by Uisce Éireann.

Water Supply Infrastructure

It is proposed to take a connection off the 250mm asbestos watermain on the Dyke Road. The new watermain will pass through the Phase 1 lands and loop around 3 sides (south, east, and north) of the development.

Residual Effects

Residual impacts will be non-significant following implementation of mitigation measures and good construction practices.

Conclusion

This chapter concludes that there is unlikely to be any significant adverse impacts on material assets (Utilities) as a result of the Proposed Development during either the construction or operational phases.

Utilities Part B

Introduction

This chapter of the EIAR provides an assessment of the potential impacts of the Proposed Development on materials assets or the physical resources in the environment, including built services and infrastructure comprising electricity, gas supply and information and communications technology.

Methodology

Information on built assets in the area surrounding the site of the Proposed Development was assembled by the following means:

- ESB Networks Utility Maps.
- Gas Networks Ireland Service plans.
- EIR E-Maps.
- Virgin Media Maps
- Planning Application Services Report (Homan O'Brien Associates, 2023)

Baseline Environment

In relation to electricity supply, Galway 110kV substation is the closest substation to the Proposed Development and is located approximately 3km south (Eirgrid Group, Transmission System). The closest 220 kV transmission system is Cashla situated approximately 30km east of the Proposed Development.

The Gas Networks Ireland map indicates that connections to the natural gas network are available in the Dyke Road area. There is currently no onsite consumption or use of natural gas, and the nearest gas supply serves the adjacent Galway Shopping Centre.

In terms of broadband two of the main utility companies are available adjacent to the site namely Open Eir and Virgin.

Construction Phase

Power Supply

Construction related activities will require temporary connection to the local electrical supply network and a temporary suspension of the network locally to facilitate the connection works may be required. The potential impact from the Construction Phase of the Proposed Development on the local electrical supply network is likely to be slight, temporary and negative to neutral, depending on the length of temporary network suspensions.

Gas Supply

There are no gas requirements during the Construction Phase and there will be no connections made to the natural gas network as part of the Proposed Development. As such, the potential impact from the Construction Phase on the gas supply network is likely to be permanently neutral and imperceptible.

Information and Communications Technology (ICT)

Connections may be required to the existing ICT network during the Construction Phase of the Proposed Development. Due to the temporary nature of the Construction Phase, the likely

effect of the Construction Phase on the local telecoms network will be neutral, imperceptible, and temporary.

Operational Phase

Power Supply

Electricity will be required to provide public lighting, domestic lighting, power supply and heating for each individual unit for the Proposed Development. Electric car charging facilities will be provided in the car park in line with government policy. A Building Lifecycle Report has been prepared for the Operational Phase of the Proposed Development, which provide details on the mechanical and electrical services that will be installed at the Proposed Development. Low Energy Technologies considered are listed in this report including:

- Charging Points.
- Centralised Air to Water Heat Pump.
- Individual MVHR system for each apartment.
- Low Energy LED Lighting.

The impact of the Operational Phase of the Proposed Development on the electricity supply network is likely to be an increased demand to the existing supply. The potential impact from the Operational Phase on the electricity supply network is likely to be neutral, long term and not significant.

Gas Supply

The Proposed Development will not be connected to the natural gas network. Heat Pumps (exhaust air heat pump and air source heat pump) powered by electricity will be used for space heating and domestic hot water during the Operational Phase. As such, the potential impact from the Operational Phase on the gas supply network is likely to be permanently neutral and imperceptible.

Information and Communications Technology (ICT)

There will be a marginal increase in demand on the local telecommunications network during the Operational Phase. The Site of the Proposed Development is partially located within an area where high speed broadband is available. The likely effect of the Operational Phase on the local telecoms network will be neutral, and imperceptible in the long term.

Mitigation and Monitoring

New connections for electricity and telecommunications will be coordinated with the relevant utility provider and Galway County Council and will be carried out and tested by approved contractors, as per standard protocols. The installation of the utilities during the Construction Phase of the Proposed Development will be monitored by the Main Contractor and inspected by the Design Team.

The Management Company will be responsible for the provision of a leaflet to all new tenants encouraging energy efficient operation of their system. The building management company, residents, tenants and creche operators will be required to maintain all utilities as required by the Utility Providers i.e. pay their respective utility bill as they arise.

Residual Effects

Having regard to the prevention and mitigation measures proposed within this and other chapters of the EIAR, no significant residual impacts are anticipated.

16 CULTURAL HERITAGE

This chapter aims to assess, as far as reasonably possible from existing records, the archaeological and cultural heritage resource, to evaluate the potential or likely impacts that the Proposed Development will have on this environment and, where appropriate, to suggest mitigation measures to reduce potential impacts, in accordance with the policies of:

- The Department of Housing, Local Government and Heritage.
- The National Monuments Acts (1930-2023).
- Galway City Development Plan (2023-2029).
- Best practice guidelines, including the TII Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects.

The general methodology used in the preparation of the assessment aligns with guidance provided in the EPA's Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2022, Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII, 2024) and other relevant guidelines. A field inspection was also carried out.

This chapter addresses cultural heritage under the two headings of archaeology and architectural/built heritage.

This chapter has been prepared by Declan Moore, Managing Director of Moore Archaeological and Environmental Services Ltd. Declan Moore studied Archaeology and English at University College Galway, graduating in 1991. He obtained a Certificate in Management Studies in 1994 and became a licence eligible archaeologist in 1999. He has over 30 years' experience as a field archaeologist and consultant. Declan is a Member of the Institute of Archaeologists of Ireland and the European Association of Archaeologists.

Construction Phase

The Proposed Development will have no direct physical effect on known archaeological sites and monuments. The footprint of the Proposed Development is located on already developed lands and has been significantly disturbed in the past. The potential for direct impacts on previously unrecorded archaeological material at this location was assessed as low. The Proposed Development will have no direct physical effect on known architectural sites.

Operational Phase

The developed nature of the surrounding landscape means that the operational phase will not affect the setting of recorded archaeological monuments. The developed nature of the surrounding landscape means that the operational phase will not affect the setting of recorded architectural sites.

Mitigation and Monitoring

It is recommended that a suitably qualified archaeologist monitor initial groundworks/site investigation works to establish the extent of previous ground disturbance at the site. Based on the results of this work, further mitigation such as intermittent inspections may be recommended if deemed required.

No operational phase mitigation is recommended.

Residual effects

There will be no residual impacts on the cultural heritage resource if the above-described mitigation is implemented.

17 RISK

It is critical that any project is screened against potential risks which it might encounter and/or impose on the nearby environment during its construction and operational phase. This chapter sets out the assessment of the vulnerability of the Proposed Development.

To understand the potential consequences and predicted impacts of any major accident or disaster due to the Proposed Development and the vulnerability of the project, a desk study was undertaken. The assessment reviewed:

- The vulnerability of the project to major accidents or disasters.
- The potential for the project to cause risks to human health, cultural heritage and the environment, because of that identified vulnerability.

A methodology has been used including the following assessment:

- Identifying and screening the hazards;
- Screening the hazards;
- Identifying the impact;
- Assessing the likelihood of the major accident or disaster occurring, and
- Assessing any risks that remain.

The design has considered the potential for flooding, road accidents, invasive species or fire within the design methodology. From this, it is considered that the vulnerability of the Proposed Development to major accidents and/or disasters is not significant.

Residual impacts will be negiligble once all control, mitigation and montoring measures have been implemented.

18 INTERACTIONS

Interrelationships between various environmental aspects must be considered when assessing the impact of the proposed development, as well as individual significant impacts. The significant impacts of the proposed development and the proposed mitigation measures have been detailed in the relevant chapters of this report. However, as with all developments that poses potential environmental impacts, there also exists potential for interactions/interrelationships between the impacts of different environmental aspects. The results may exacerbate or ameliorate the magnitude of impacts.

When considering interactions, the assessor has been vigilant in assessing pathways – direct and indirect – that can magnify effects through the interaction. In practice many impacts have slight or subtle interactions with other disciplines.

The environmental impact assessment report concludes that inter-relationships are negligible, and no additional significant effects are identified through effect interactions.

19 MITIGATION

The Proposed Development will be operated in a manner that will ensure that the potential impacts on the receiving environment are avoided where possible. In cases where impacts or potential impacts have been identified, mitigation measures have been proposed to reduce the significance of particular impacts. These mitigation recommendations are contained within each topic chapter exploring specific environmental aspects.

The mitigation and monitoring chapter of the environmental impact assessment collates and summarises the mitigation commitments made in Chapter 5 to Chapter 16.

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