

# EIAR Non-Technical Summary

PRESENTED TO

**BPM GP3 Limited**  
**Proposed Retail Park Development**

December 2022

Louth CC, Planning Department - Viewing Purposes Only

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## 1 INTRODUCTION

This Environmental Impact Assessment Report (EIAR) has been commissioned by the Applicant, BPM GP3 Limited, in respect of a retail development at lands adjoining the existing M1 Retail Park.

An Environmental Impact Assessment Report (EIAR) is an assessment and analysis of potential impacts on the receiving environment that may arise as a result of the Proposed Development. An EIAR is required to accompany a planning application for development of a class set out in Schedule 5, Part 1 of the Planning and Development Regulations which exceeds a limit, quantity or threshold set for that class of development.

Schedule 5, Part 2 of the Planning Regulations defines projects that are assessed on the basis of set mandatory thresholds for each of the project classes including:

*"Schedule 5, Part 2 - Infrastructure projects*

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

*(In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)*

A retail development could constitute an urban development. The adjacent land use to the north is predominantly commercial and retail. Therefore, it is considered that the site is located within a business district. The overall site area is 4.82 ha which is greater than the 2-hectare threshold. It is on this basis that an EIAR has been prepared.

In assessing the environmental impacts, this EIAR will evaluate the existing situation and assess any potential impacts of the Proposed Development. Where potential impacts are identified, mitigation measures will be proposed. In addition, the in-combination effects of any other known plans or projects will be identified and assessed.

This Non-Technical Summary (NTS) describes the Proposed Development, the Environmental Impact Assessment (EIA) process and summarises the key environmental impacts arising from each of the environmental assessments carried out by a panel of experts in accordance with best practice. The environmental assessments involved desktop studies, site visits, surveys, and site-specific investigations. The NTS also outlines the mitigation and monitoring measures proposed along with a list of any residual impacts that may occur from the Proposed Development.

## 2 OVERVIEW OF THE PROPOSED DEVELOPMENT

The Proposed Development will consist of a retail development comprising:

*A retail/commercial development comprising: (i) provision of 10 no. retail units including a part-licenced anchor retail supermarket store (Unit 1)(4,085sq.m gfa), a DIY/Home store, including a garden centre(Unit 10)(2,350sq.m gfa), 8 no. smaller retail/commercial units, including a café and pharmacy (Units 2-8) (ranging in size from 300sq.m – 760sq.m gfa) and 1 no. single storey Drive-Thru Restaurant/Café unit (375sq.m). A deliveries area, service yard and ground mounted plan units will be provided to the side (south) and rear (west) of Retail Unit 1, a dedicated set down point is also proposed adjacent to the front entrance to Retail Unit 1. Deliveries will also be accommodated to the rear (south) of the proposed retail units (Units 2-10) with a truck turning area provided to the rear (south) of unit 10. Dock levellers will also be provided to the rear of units 2-10 to facilitate loading and unloading of goods. A total of 311 no. car parking spaces are proposed to serve the proposed development, including 23 no. accessible parking spaces, 2 no. click and collect spaces and 17 no. parent and child spaces. A bus/coach parking area comprising 4 no. bus/coach parking spaces is also provided within the eastern portion of the site, adjacent to the Trinity Street Frontage. 104 no. bicycle parking spaces are proposed at surface level to serve the proposed retail units. A partially covered pedestrian circulation space will be provided to the front of each of the proposed retail units. The development also includes: (ii) provision of 2 no. vehicular and pedestrian connection points to the existing M1 Retail Park to the north which will provide access to the proposed retail development; (iii) internal roads, footpaths and pedestrian crossings; (iv) trolley bays, signage, landscaping, boundary treatments, and lighting; (v) associated site and infrastructural works are also proposed which include: foul and surface water drainage, plant areas; 3 no. ESB substations; and (vi) all associated site development works necessary to facilitate the proposed development.*

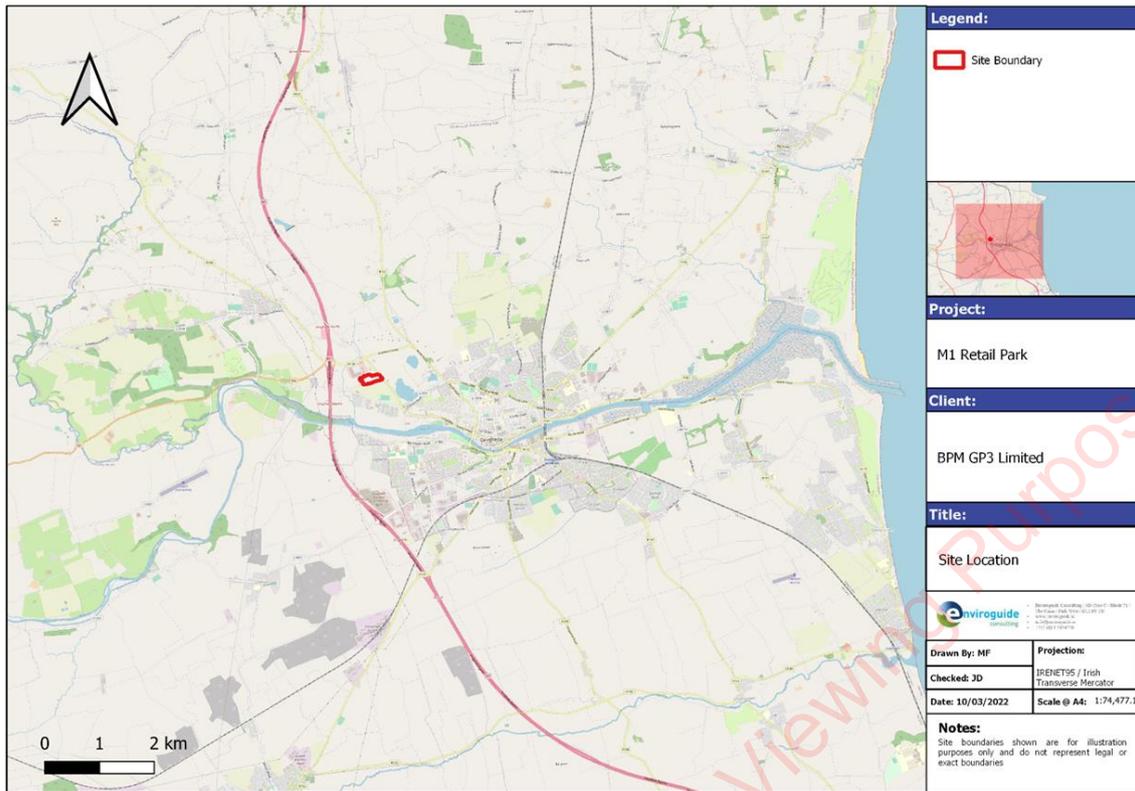


Figure 2-1 Location of the Proposed Development



Figure 2-2 Proposed Site Layout (Drawing number MM1-MCA-00-00-DR-A-2000, MCA Architects)

## 2.1 Construction Phase

The total Construction Phase is estimated at 24 no. months. Site enabling works, including bulk excavations for foundations and attenuation tanks and infilling to the correct levels, will last approximately 2 no. months. Construction of the Proposed Development will last approximately 22 months.

## 2.2 Operational Phase

The Operational Phase of the Proposed Development will provide for additional commercial/retail units on lands to the immediate south of the existing M1 Retail Park, Mell, Drogheda Co. Louth, the area will therefore be operating at a greater retail use capacity.

## 3 SITE DESCRIPTION

The site of the Proposed Development is located on lands to the south of the existing M1 Retail Park in the townland of Mell, in the Civil Parish of Tullyallen, Co. Louth. The M1 is located approximately 0.55km west of the site and Drogheda Town Centre lies approximately 2.5km southeast of the Proposed Development. The immediate surrounding landscape is urban/residential to the north (the existing M1 Retail Park and a dwelling and its garden lie adjacent to the northern boundary of the site), with the remaining surrounding landscape to the east, south and west, predominantly agricultural in nature. The R168 (Trinity St) road is adjacent to the east of the site, and Barrack Lane is adjacent to the south of the site.

## 4 ENVIRONMENTAL IMPACTS

The potential Environmental Impacts of the Proposed Development during all phases of the Proposed Development are addressed in the EIAR under the following headings as prescribed under the EIA Directive:

- Population and Human Health
- Biodiversity
- Land and Soils
- Hydrology and Hydrogeology
- Air Quality and Climate
- Noise and Vibration
- Landscape and Visual Amenity
- Archaeology and Cultural Heritage
- Material Assets: Traffic, Waste and Utilities

Additionally, risk management and interactions between environmental factors have been examined, and a programme of mitigation and monitoring measures has been set out.

### 4.1 Population and Human Health

'Population and Human Health' looks at the potential effects of the Proposed Development on human beings, living, working and visiting in the vicinity of the application site lands to the south of the existing M1 Retail Park.

This assessment focuses on the socio-economic impacts and is focused in particular on relevant issues such as residential amenity, economic activity, tourism and population levels. One of the principle concerns in any Proposed Development is that the local population experiences no reduction in the quality of life as a result of the development on either a permanent or temporary basis.

A desk-based study was undertaken in September 2022 where data from the Central Statistics Office (CSO) was reviewed in-depth to assess information regarding population, age structure, economic activity, employment, and unemployment within the vicinity of the Proposed Development. Relevant legislation and published documents were also assessed. The aim of the study was to assess the positive and negative impacts of the Proposed Development on the socio-economic environment.

The Proposed Development will result in a maximum of 150 no. construction staff at the peak Construction Phase which will have a positive impact on the local economy and employment. The Proposed Development will have a moderate, positive, short-term impact on economic activity. The Proposed Development will also facilitate the creation of approximately 78 no. full time operational staff which will also have a moderate, positive impact which will last for the duration of the retail park. Employment and income are among the most significant determinants of long-term health. Therefore, the Proposed Development has the potential to provide health improvements due to the creation of additional employment which will provide a moderate, positive impact both directly and indirectly to the local economy and employment.

The Construction Phase of the Proposed Development will potentially cause some additional noise, mobility of heavy vehicles, dust and traffic in the form of the arrival and departure of construction workers and deliveries into the area. The impacts of the Construction Phase will be short term and will only last for the duration of the construction works. Construction phase mitigation measures will be put in place and no significant impacts have been identified in terms of population and human health. During the Operational Phase, there will be an increase in the number of deliveries arriving at the site and transport of operational staff. There will be a moderate to significant negative impact on traffic and mitigation measures have been proposed to limit the effect.

There will be no negative cumulative impacts associated with population and human health.

## 4.2 Biodiversity

The Biodiversity Chapter describes the Biodiversity of the Site of the Proposed Development and surrounding environs, with emphasis on habitats, flora and fauna. It details the methodology of assessment used in each case and 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 any potential 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 series of surveys including bird surveys, bat surveys, mammal surveys and habitat and flora surveys were undertaken. All surveys were carried out following standard and/or best practice protocols. The Site consists of large areas of grassland, scrub and boundary treelines and hedgerows.

The value of the ecological resources 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 to be impacted significantly by the Proposed Development. This evaluation scheme has been adapted here to assess the value of habitats and fauna within the Site of the Proposed Development. The value of habitats 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 as 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 protected flora were recorded at the Site and it is not expected that any will be impacted by the Proposed Development. No high impact invasive species were recorded at the Site, non-native butterfly-bush (*Buddleja davidii*) and sycamore (*Acer pseudoplatanus*) were recorded on Site. The following species were identified as KERs: bats, birds, otter (*Lutra lutra*), small mammals and fish species in downstream waterbodies. The following habitats were identified as KERs: dry meadows and grassy verges (GS2), treelines (WL2), hedgerows (WL1) and scrub (WS1). The 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).

The potential for the Proposed Development to impact on nearby protected areas is also considered. 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 the Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) accompanying this application. The closest designated sites to the Proposed Development include the River Boyne and River Blackwater SAC, Boyne Coast and Estuary SAC, the River Boyne and Blackwater SPA and the Boyne Coast and Estuary pNHA. These sites are hydrologically linked to the Proposed Development via the Mell stream.

Potential impacts of the Proposed Development, in the absence of mitigation, can be summarised as follows:

- Water quality impacts to the Mell stream and downstream River Boyne and Boyne Estuary;
- Semi-natural habitat loss and damage to habitats being retained;
- Disturbance and/or mortality of fauna within the Site;
- Loss of potential commuting, foraging, nesting and roosting habitat for birds, small mammals, amphibians, and reptiles; and
- Noise and dust emissions from the Site during the Construction and Operational Phases.

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 on water quality within the Mell Stream and nearby designated

sites, a range of mitigation measures to protect surface water quality are provided. These measures will also protect and mitigate impacts to downstream waterbodies during the Construction and Operational Phases. Boundary vegetation identified for retention will be protected for the duration of the Construction Phase, this will involve the use of protective fencing, signage and/or ground protection prior to any materials or machinery being brought on Site. The protective barriers will remain on Site for the duration of works and only removed upon completion of all construction activity. Two non-native flora species were encountered at the Site, as these species are not considered to be high risk flora, potential impacts of their spread can be addressed by good site biosecurity hygiene and best practice removal methods.

Seasonal restrictions will apply for vegetation removal on Site to protect local fauna, with the preferred period for vegetation removal within the months of September and October. The retention of boundary vegetation where possible along with wildlife friendly lighting will allow for bats in the locality to utilise these habitats and the proposed additional planting for commuting, foraging and potentially roosting. Wildlife friendly lighting will be used throughout the Site to ensure the Site continues to provide commuting habitat for light-sensitive bat species.

Disturbance and/or mortality to local fauna within the Site (e.g., birds, small mammals) 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, headwall and surface water sewer construction, timing of and approach to vegetation clearance, increased human presence). Provided all mitigation measures detailed in the Biodiversity Chapter 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.

If the Proposed Development were not to go ahead, habitats at the Site would continue to naturally evolve. The scrub would continue to encroach on the grassland habitat, eventually dominating the Site. The treelines, scrub and hedgerows would continue to serve as an important and well-established biodiversity corridor, providing habitat connectivity, nesting/roosting and foraging habitat for birds and mammals.

### **4.3 Land and Soil**

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

The Applicant is seeking planning permission for development on lands to the south of the existing M1 Retail Park, Mell, Drogheda, Co. Louth.

Construction will involve all excavation to reduce levels to construct foundations and surface water drainage including an attenuation tank to a maximum depth of 3.3meters below ground

level. The approximate anticipated cut volume is 51,405m<sup>3</sup>, the approximate anticipated fill volume is 16,720m<sup>3</sup>. Excavated material that cannot be reused on-site will be temporarily stockpiled at the Site and then be removed by the licenced waste carriers and sent for reuse at other local development sites or recovery with disposal considered as a final option only. The Proposed Development will include the importation of aggregates for the construction of roads and other infrastructure.

The appointed Contractor will review and update, as necessary the Construction Environmental Management Plan (CEMP) to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground having regard to the CEMP, CDWMP and relevant industry standards.

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.

All works during the Construction Phase of the Proposed Development will be undertaken in accordance with the requirements of the CEMP and CDWMP

During operation, there will be no excavation of soil or bedrock. There will be no discharges to ground (except for infiltration from SuDs). Approximately 66% of the Proposed Development Site area will be hard covered with buildings and impermeable pavement on completion of the Proposed Development.

Overall, there will be no significant adverse impacts as a result of the Proposed Development on the land, soil and geology environment. The Proposed Development will have an overall 'imperceptible' impact on the receiving land, soil and geology environment.

#### **4.4 Hydrology and Hydrogeology**

An assessment of the potential impact on the existing water hydrological and hydrogeological environment was carried out by Enviroguide Consulting for the Proposed Development Site.

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

The Applicant is seeking planning permission for development on lands to the south of the existing M1 Retail Park, Mell, Drogheda, Co. Louth.

Construction will involve all excavation to reduce levels to construct foundations, surface water sewer connection (new head wall), construction of new foul drainage and connection to existing system parallel to Barrack Street, construction of new water connection on Collon Road, cut and full to reach required final floor levels and construction of SuDs including permeable pavement, attenuation tanks, bioretention and filter drains.

The appointed Contractor will review and update the Construction Environmental Management Plan (CEMP), as necessary, to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground having regard to the CEMP, CDWMP and relevant industry standards.

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.

All works during the Construction Phase of the Proposed Development will be undertaken in accordance with the requirements of the CEMP and CDWMP. A monitoring programme will be implemented during construction of the new head wall in the Mell Stream.

There will be no unauthorised discharge of water (groundwater or surface water runoff) to ground, drains or water courses during the Construction Phase of the Proposed Development.

During Operation, there will be no discharge to ground (except for the infiltration from SuDs).

The surface water from road, paved areas and car parking will be collected in the new surface water drainage system which has designed in accordance with the Greater Dublin Strategic Drainage Strategy (GDSDS). Surface water connection via the public road will be agreed with Louth County Council, should a Grant of Planning be forthcoming, to the Mell Stream (Exact outfall will be agreed with County Council following pre-construction ecology survey, should a Grant of Planning be forthcoming).

Foul water from the Proposed Development will connect to the existing sewer parallel to Barrack Lane. Foul water will discharge to Drogheda WWTP. Capacity within the existing foul network was confirmed by Irish Water in a letter of feasibility (COF: CDS22001877).

Water supply to the Proposed Development will be provided by the existing Irish Water infrastructure by adding a new connection to the existing main on Collon road. Confirmation of capacity was confirmed by Irish Water (subject to upgrades) (COF: CDS22001877).

Overall, there will be no significant adverse impacts as a result of the Proposed Development on the receiving groundwater and surface water environment. The Proposed Development will have an overall 'imperceptible' impact on the receiving hydrological and hydrogeological environment.

#### **4.5 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 (PM<sub>10</sub>) 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 moderate 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 50m from the site. There are a number of high-sensitivity receptors (residential dwellings) located within 50m of the site boundary; these are situated to the south of the Proposed Development site. 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.

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, PM<sub>10</sub> and PM<sub>2.5</sub> should be predicted in line with the methodology as outlined within TII guidance. Construction traffic is expected to result in a significant change (> 10%) in AADT flows near to sensitive receptors. Therefore, concentrations of NO<sub>2</sub> and PM<sub>10</sub> have been predicted in the Opening Year (2024).

The air dispersion modelling concluded that the Proposed Development is likely to result in a long-term increase in traffic on the roads surrounding the Proposed Development site; however, this increase in traffic has been determined to have an overall insignificant impact in terms of local air quality. Furthermore, the increase in traffic has been determined as marginal with regard to climatic impacts. Therefore, no adverse residual impacts are anticipated from the proposed scheme in the context of air quality and climate.

There is the potential for combustion emissions from onsite machinery and traffic derived pollutants of Carbon Dioxide (CO<sub>2</sub>) and Nitrous Oxide (N<sub>2</sub>O) 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.

All Construction Phase monitoring will be carried out in line with the Construction Environmental Management Plan (CEMP) for the site. Due to the negligible impact on air quality and climate from the Operational Phase of the Proposed Development, no specific monitoring is recommended during this stage.

#### 4.6 Noise and Vibration

This Chapter assesses the potential noise and vibration impacts from the Proposed Development. There are three residential noise sensitive locations (NSL) immediately adjacent to the development site, two of these with multiple residences. The residential locations have been identified using aerial photography and the Eircode database. It is appropriate to assess the noise impacts of the Proposed Development on these three locations, since more distant NSLs will naturally receive lower noise emissions from the site due to distance attenuation etc.

To assess the baseline noise conditions, attended measurements at all 3 positions were conducted on 15<sup>th</sup> June 2022 with unattended noise monitoring conducted at position 1 from 13<sup>th</sup> to 15<sup>th</sup> June 2022. In summary, the attended baseline survey results are considered to be characteristic of a medium noise environment influenced by major roadways. The existing ambient noise conditions were broadly similar at all three positions during the attended noise survey. The results of the unattended monitoring are considered to be characteristic of a medium noise environment, as would be expected given the proximity to the M1 motorway and Trinity Street.

Construction noise levels have been predicted, based on the expected equipment on the site developed with input from the development project design team. During the Operational Phase of the Proposed Development, the following are expected to generate noise emissions:

- External mechanical and electrical (M&E) plant:
- Deliveries:
- Retail road traffic:

The Construction Phase of the development would include emission of construction noise and vibration. For most phases, predicted noise levels at sensitive receivers are at or below the 65dBA limit and the predicted significance of construction noise effects is slight. The exception to this is the substructure phase which has a predicted level of 67dBA at NSL1, a marginal exceedance of the 65dBA limit. Mitigation measures will be employed to reduce the noise levels to below the 65dBA limit.

Predicted vibration levels at sensitive locations during the construction have been estimated. It is likely that the estimated vibration levels in a residential environment will cause complaint. It is usually tolerated if prior warning and explanation is given to residents. If this guidance is followed the predicted significance of effects due to construction vibration is slight.

During the Operational Phase, the magnitude of noise effects due to M&E plant noise from the development has been assessed as low and sensitivity of receivers is low due to high baseline noise conditions. Therefore, the predicted significance of M&E Plant noise effects is slight.

Noise relating to deliveries has been assessed and the predicted noise level of >50dBA at NSL1 and NSL2 would represent an exceedance of the 45dBA night-time noise limit. The high levels of existing background noise after 05:45 hrs indicates that early morning deliveries may be tolerated as predicted levels are close to background. However, impulsive noise characteristics would change this result and therefore significant noise impacts would be expected at NSL2 without mitigation of delivery noise. Mitigation measures have been detailed which should be sufficient to avoid significant adverse noise impacts from deliveries

*The significance of impacts due to changes in road network traffic noise is predicted to be not significant. For retail site internal road traffic noise, the predicted noise levels are below the daytime noise limit of 55dB and effects due to internal road traffic noise are expected to slight.*

There are no Operational Phase vibration impacts predicted.

Mitigation measures have been detailed to reduce any potential noise and vibration impacts during the Construction and Operational Phase.

No potential cumulative noise impacts have been identified.

It is recommended that noise monitoring of works is conducted when each stage of the construction commences. It is not anticipated that vibration monitoring would be required provided that adequate setback distances of vibration inducing equipment from sensitive locations are observed. It is not expected that operational noise and vibration monitoring would be required for the Proposed Development. If, however, adverse noise impacts were to be identified at one of the noise sensitive locations, a boundary noise monitor may be installed to monitor noise and inform avoidance/mitigation efforts.

#### **4.7 Landscape and Visual**

The purpose of the landscape assessment is to evaluate the existing landscape character of the Site and surroundings, to assess the landscape and visual impact of the Proposed Development and to identify landscape designations and planning policies that may concern the subject site and its environs.

This Chapter has related the Landscape Impact Assessment (LIA) and the Visual Impact Assessment (VIA) in respect of a Proposed Retail Development at lands adjoining the M1 Retail Park County Louth, including a part-licensed anchor retail supermarket store (Unit 1)(4,085sq.m gfa), a DIY/Home store, including a garden centre (Unit 10)(2,350sq.m gfa), 8 no. smaller re-tail/commercial units, including a café and pharmacy (Units 2-8) (ranging in size from 300sq.m – 760sq.m gfa) and 1 no. single storey Drive-Thru Restaurant/Café unit (375sq.m).

The site of the Proposed Development is currently predominately greenfield with some dispersed trees and shrubs and is located on lands adjoining the existing M1 Retail Park in the townland of Mell, in the Civil Parish of Tullyallen, Co. Louth. The immediate surrounding

landscape is urban/residential to the north, with the remaining surrounding landscape to the east, south and west, predominantly agricultural in nature.

In terms of the LIA some significant changes will occur on the landscape of the site, mainly with the removal of existing vegetation, earth movements and general construction activity to the implementation of the proposed buildings, but these changes will also be counterbalanced with the implementation of the new green structure and maintenance of some hedgerows (namely on the western limit and the existing sections on the southern limit).

In what refers to the VIA, 14 viewpoints were assessed, chosen by sensitivity of the views through site visits and Viewshed's analysis. As it can be seen by the conclusion on the visual effects (Chapter 10.5.2.5) the visual impacts of the Proposed Development are limited to the viewpoints in closer areas of the site that do not have a natural or physical barrier in the existing situation – namely the north and east front. The typology of the proposed buildings adapts well to the existing commercial environment. The new plantings planned for the peripheral zones of the Proposed Development will manage to mitigate the minor visual impacts caused in the short to medium term.

#### **4.8 Archaeology and Cultural Heritage**

An assessment of the baseline Archaeological, Architectural and Cultural Heritage conditions of the surrounding environment for the Proposed Development was completed, in order to determine any significant impacts that may arise as a result of the development and highlight any potential effects this may have on these resources.

The assessment involved a desktop study/paper survey which considered all available archaeological, architectural, historical and cartographic sources. This information was used in order to assess any potential impact on the receiving environment and to identify measures to ensure the conservation of any monuments or features.

There are no records of any recorded monuments within the Site boundary of the Proposed Development. There were 22 no. recorded Monuments and Places within a 1.5 km radius of the Site of the Proposed Development. These comprise 1 no. Burial ground, 2 no. Fords, 2 no. ringforts, 2 no. Souterrains, 3 no. enclosures, 3 no. Ritual sites, and 3 no. Fulacht fia among other site-types. None of the above recorded Monuments and Places will be affected by the Proposed Development.

A search in the topographical files in the National Museum of Ireland produced 1 no. results for the development lands and surrounding areas. This consisted of several historic objects located at the Hill of Rath located 1.3 km East of the Proposed Development.

The Historic six-inch Ordnance Survey Map and Historic twenty-five-inch Ordnance Survey Map show similar field layout and indicate that the Site of the Proposed Development and the surrounding lands were historical used predominantly for agricultural purposes.

There are a total of 18 no. Architectural Conservation Areas (ACAs) in the Drogheda townland. The Proposed Development does not lie within any of the above designated areas. The nearest ACA to the Site is Windmill Road which is located 1.9km East.

there are no protected structures within the Site boundary. The nearest protected structure is Drybridge Cottage (DB-292) located 0.5 km West of the Proposed Development. None of the above recorded Protected Structures or features of architectural significance will be affected by the Proposed Development.

It is possible that excavation works associated with the Proposed Development may have an adverse impact on small or isolated previously unrecorded archaeological features or deposits that have the potential to survive beneath the current ground level. It is therefore recommended that if any archaeological remains are discovered during this project, all works will cease and an expert archaeologist will be brought to Site and all future works will be carried out under the supervision of the archaeologist.

#### **4.9 Material Assets: Traffic**

This Chapter assesses the traffic and transport impacts of a proposed retail at the M1 Retail Park, Drogheda, Co. Louth (the Proposed Development) on the local road network, as well as identifying proposed mitigation measures to minimise any impacts.

Access from the site to the local road network is via an internal roundabout to the R168 link which runs northwards towards the N51 and southwards towards Drogheda.

From the R168 junction with the N51, access to the M1 is 500 metres to the west. To the east, the N51 intersects with the R132, 900 metres from its junction with the R168.

The four critical junctions are thus as follows:

- Junction No. 1 – R168 / Retail Park Access Road roundabout junction
- Junction No. 2 – N51 / R168 / L6322 roundabout junction
- Junction No. 3 – N51 / R132 roundabout junction
- Junction No. 4 – M1 / N51 Interchange

Traffic surveys were carried out on Tuesday 5<sup>th</sup> April 2022 for the 3 No. roundabout junctions close to the Proposed Development.

During the Construction Phase there will be an estimated 160 no. vehicles accessing the site daily during the enabling works phase which will reduce to 80 vehicles outside of the excavation period. The impact of the development during the Construction Phase will have a slight impact on the road network with short term temporary slight effects.

During the Operational Phase, traffic flows generated by the Proposed Development have been predicted. The Proposed Development will have a moderate to significant impact with a moderately negative long-term effect on the 3 no. critical junctions. Mitigation measures have been incorporated into the design to limit the effect.

The potential impact on public transport and the cycling network has also been assessed. Given that the mobility management plan for the proposal predicts only 2% of workers / customers travelling to the Proposed Development by bicycle, with only 9% travelling by public transport, the impact on these modes of transport are predicted to be low.

There are no likely indirect impacts arising as there are no substantial adjacent planned developments close to the subject site.

Construction traffic will be monitored to ensure that the construction vehicles are travelling to and from the Proposed Development at the agreed times with the Local Authority. It is management's intention that a Mobility Management Strategy Co-ordinator be appointed to administer, implement, monitor and review mobility management issues for the Proposed Development.

#### **4.10 Material Assets: Utilities and Waste**

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, information and communications technology (ICT), surface water/stormwater drainage, water supply, the foul water network and waste management infrastructure.

Construction related activities will require temporary connection to the local electrical supply network for lighting and construction activities. Connecting a new multi-unit housing development to the electricity distribution system must be carried out in accordance with ESB Networks' specifications. A temporary suspension of the network locally to facilitate the connection works may be required during the Construction Phase, and an additional temporary suspension will also occur when power is provided to the site of the Proposed Development. These temporary suspensions will be controlled by ESB Networks as the statutory undertaker and in accordance with standard protocols. The potential impact from the Construction Phase of the Proposed Development on the local electrical supply network is likely to be negative, slight, and short-term. During the Operational Phase of the Proposed Development electricity will be required to provide public lighting, domestic lighting, power supply and heating for each individual unit. Electric car charging facilities will be provided in the car park in line with Government policy. All public and amenity lighting will use low energy LED light fittings and be installed in line with Louth County Council's (LCC) specifications. LED light fittings with presence-detection will also be used throughout circulation areas and will be locally controlled. The impact of the Operational Phase of the Proposed Development on the electricity supply network is likely to be to increase demand to the existing supply. The potential impact from the Operational Phase on the electricity supply network is likely to be neutral and not significant in the long term.

Connections will be required to the existing ICT network during the Construction Phase of the Proposed Development which, if not conducted in accordance with best practice, has the potential to impact on local telecoms & ICT connectivity. However, due to the temporary and phased nature of the Construction Phase the potential impact of the Construction Phase on the local telecoms network is considered negative and not significant. The impact of the Operational Phase of the Proposed Development on the telecoms network is likely to be a marginal increase in demand. The Site of the Proposed Development is located within an area where high speed broadband is available, and as such, the impact from the Operational Phase on the telecoms network is likely to be neutral and not significant in the long term.

During the Construction Phase of the Proposed Development, it is considered that any impact on the hydrogeological regime within the underlying aquifer is unavoidable, and will be

negative and imperceptible in the short-term, however, the effects will only occur within a very localised zone of the aquifer and there will be no impact on the hydrogeological regime of the receiving groundwater body and associated downgradient receptors. As the current greenfield lands will be replaced by hardstanding areas in the Proposed Development, during the Operational Phase the permeability of the surface cover at the Site will be modified, however, discharge to ground from the on-site attenuation features will increase recharge from the Site. Rainfall will enter the ground from slow infiltration from the permeable paving and through permeable geotextile material from the bio-retention/tree pits. While there may be local variations in the mechanism for groundwater recharge, the overall regional groundwater flow regime will not be altered. The impact of the Site Development on the recharge regime will be neutral and imperceptible in the long term.

Surface water runoff from the Proposed Development Site will be discharged to the existing surface water drainage sewer on Barrack Lane south of the site. The surface water discharge consists of a 225mm uPVC sewer, the drainage outfalls to a tributary stream (Tullyeskar River, Kenny's stream) which ultimately discharges to the Boyne River. Construction Phase activities at the Proposed Development site could potentially impact on the water quality of surrounding surface water bodies. Control measures for potential emissions to surface water, groundwater and soil are detailed in the Construction Environmental Management Plan (CEMP) (Enviroguide Consulting, 2022) and will be implemented by the appropriate contractor as required. The surface water drainage system for the Proposed Development has been designed in accordance with the principles of Sustainable Drainage Systems (SuDS), as embodied in the recommendations of the Greater Dublin Strategic Drainage Study (GSDSDS). A two-stage treatment is proposed for the site. Interception and attenuation storage, and 20% climate change has been applied to the design calculations in accordance with GSDSDS guidelines. The surface water management strategy includes a number of measures that will capture any potentially contaminating compounds in surface water runoff from roads and the impermeable areas. Given the design of the surface water management strategy for the Proposed Development and the implementation of SuDS features, it is considered that there will be an overall neutral, imperceptible, long-term impact on the receiving surface water quality of the Tullyeskar River and the Boyne River.

Commencement of construction activities will result in a net increase in the water demand for the site. Water supply to the Proposed Development will be provided by the existing Irish Water (IW) infrastructure by adding a new connection to the existing 450mm diameter watermain along Collon road. Some local diversions may be required to water supplies to accommodate the construction works which may require temporary outages. Additionally, new connection works may cause water supply disruptions during the Construction Phase. These disruptions will be controlled by IW and LCC in accordance with standard protocols. All watermains will be laid strictly in accordance with IW's standard protocols, and valves, hydrants, scour and sluice valves and bulk water meters will be provided in accordance with the requirements of IW. Due to the nature of the works during the Construction Phase, the likely impacts on the local mains water supply will be negative, not significant and temporary. During the Operational Phase of the Proposed Development there will be a demand for water from the public water supply. The likely impact of the increase in mains water demand will be neutral and not significant on mains water supply in the long-term.

A temporary connection to the existing foul water network is required to facilitate on-site works for all developments. It will be the Main Contractor's responsibility to apply to Irish Water for connections to the network, and all connections to the foul water network will be constructed strictly in accordance with IW's requirements. The proposed foul drainage system can connect to the existing 225mm sewer pipe laid parallel to Barrack Lane that outfalls to the pumping station. The pumping station will need to be upgraded to accommodate the increase in population, but the rising main infrastructure is already in place as described. The proposed pipe network has been designed in accordance with the relevant requirements of the Irish Water Code of Practice for Wastewater Infrastructure. The new connection works may cause disruptions to the foul water network during the Construction Phase. These disruptions will be controlled by IW and DCC in accordance with standard protocols. Due to the nature of the works during the Construction Phase, the likely effect will be negative, non-significant and temporary. Capacity within the existing foul sewer network has been confirmed by Irish Water. The foul water from the Proposed Development will be discharged from the Site will be to mains sewer and discharge to be treated at Drogheda Waste Water Treatment Plant (WWTP). The increase in wastewater being discharged to the public sewer will have a negative but non-significant impact on the capacity of the sewer in the long term.

Most of the waste arising during the Construction Phase will comprise soil and stone materials associated with the excavation works required for the basement, foundations and connections to utilities and services. A member of the construction team will be appointed as the Waste Officer to ensure commitment, operational efficiency and accountability during the Construction Phase of the Proposed Development. After in-situ reuse and recycling options have been fully considered, all residual waste streams will be collected by appropriately authorised waste collection contractors and will be managed using suitably permitted/licensed waste disposal or materials recovery facilities. Due to the use of permitted/licensed waste collection/waste management facilities, it is not predicted that the production of waste will cause any likely significant effects on the environment. It is the responsibility of the Main Contractor to ensure that waste collection contractors are legally permitted to carry the waste, and that the facility they bring the waste to is licensed to handle that type of waste as outlined in the Waste Management Acts 1996 (as amended). Any surplus soils that cannot be reused on site will be removed offsite and may be reused elsewhere. The removal of any surplus soil offsite will be undertaken in accordance with applicable statutory requirements. This may include, wherever suitable, removal as by-products that meet the legislative requirements of Article 27 of the European Communities (Waste Directive) Regulations, 2011 (S.I. No 126 of 2011). Material will only be moved under an Article 27 By-product notification when it can be robustly demonstrated that all tests for Article 27 By-product are met. The monitoring of C&D waste during the Construction Phase of the Proposed Development is recommended to ensure that impacts are not experienced beyond the Site boundary. The Main Contractor will be responsible for monitoring and record keeping in respect of waste leaving the facility and that these records will be maintained on site.

The wastes that will be generated by the commercial/retail units during the Operational Phase of the Proposed Development will be similar to domestic waste types:

- Dry mixed recyclables
- Mixed Municipal (non-recyclable)
- Organic (food) waste, and

- Glass

with some additional commercial “office” type wastes such as paper and printer ink, batteries, and waste electrical and electronic equipment (WEEE).

With proper management, a high level of recycling, reuse and recovery will be achieved at the development in line with European and national waste targets, as set out in the Eastern-Midlands Region Waste Management Plan 2015-2021. In the absence of mitigation, the potential impact from the Operational Phase on municipal waste disposal is likely to be long term, negative and moderate. The building management company and retail unit operators will be required to maintain the bins and storage areas in good condition as required by the LCC Waste Bye-Laws. The designated areas for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy. The areas will be fitted with CCTV for monitoring.

The cumulative effects of Proposed Development on Material Assets will be fully assessed taking other planned, existing, and permitted developments in the surrounding area into account. All planning permission applications that have been granted and developed will be incorporated into the baseline assessment. Having regard to the mitigation measures proposed within this and other Chapters of the EIAR, no significant residual impacts are anticipated on the surrounding Material Assets.

#### 4.11 Risk Management

Risk is one of the most important elements to be considered as part of a development. 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. An assessment of the vulnerability of the Site of the Proposed Development to risks of major accidents and/or disasters was completed.

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/or the environment, resulting from that identified vulnerability.

A methodology was used including the following phases:

- Phase 1 – assessing the hazards
- Phase 2 – screening the hazards
- Phase 3 – mitigating the hazards and evaluating the residual hazards

The risk assessment conducted for the Proposed Development concludes that the vulnerability of the Proposed Development to major accidents and/or disasters is not considered significant; and the potential for the project to cause risks to human health, cultural heritage, and the environment, is not considered significant.

#### 4.12 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. This Chapter of the EIAR addresses the interactions between the various environmental factors of the Proposed Development.

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. However, the EIAR concludes that most inter-relationships are neutral in impact when the mitigation measures proposed are incorporated into the operation of the Proposed Development.

#### **4.13 Mitigation and Monitoring Measures**

This EIAR has assessed the impacts and effects likely to occur as a result of the Proposed Development on the various aspects of the receiving environment.

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 specific impacts. These mitigation recommendations are contained within each Chapter exploring specific environmental aspects.

The mitigation and monitoring Chapter of the EIAR collates and summarises the mitigation commitments made in Chapter 4 to Chapter 13.



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