

# EIAR Addendum

PRESENTED TO

**BPM GP3 Ltd**

**Retail Development at lands to the south of  
the existing M1 Retail Park**

DATE

July 2023

## DOCUMENT CONTROL SHEET

<b>Client</b>	BPM GP3 Ltd
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## LIST OF ABBREVIATIONS / TERMINOLOGY

“Previously submitted EIAR” refers to the EIAR submitted on the 9<sup>th</sup> of December 2022 as part of planning application Ref.22954.

“The Applicant” refers to BPM GP3 Limited.

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## 1 INTRODUCTION AND METHODOLOGY

This Environmental Impact Assessment Report (EIAR) Addendum has been prepared by Enviroguide Consulting on behalf of BPM GP3 Ltd. (the Applicant) in support of a planning application for a retail development submitted to Louth County Council (planning application reference 22/954).

On the 9<sup>th</sup> of December 2022 the Applicant submitted a planning application for a retail development on lands south of existing M1 Retail Park 10 no. single storey retail units including a part-licensed anchor retail supermarket store (Unit 1), a DIY/Home store, including a garden centre (Unit 10), 8 no. smaller retail/commercial units, including a cafe and pharmacy (Units 2-8) and 1 no. single storey Drive-Thru Restaurant/Cafe unit, including external seating area (referred to hereafter as the Proposed Development). The planning application was accompanied by an EIAR prepared by Enviroguide Consulting (hereafter referred to as the December 2022 EIAR).

A request for further information was issued by Louth County Council on the 3<sup>rd</sup> of February 2023 (Appendix A). A request for extension was issued to Louth County Council from the Applicant in June 2023.

### 1.1 Updated further information

This EIAR Addendum presents any modifications or updates to the assessments contained in the December 2022 EIAR. This EIAR Addendum has reviewed the following inputs:

- Updated Site Plan Layout and Elevation Drawings prepared by MCA Architects;
- Updated Landscape Masterplan Drawings prepared by Stephen Diamond Associates;
- Updated Drainage Plan Drawings prepared by Barret Mahony Consulting Engineers (BMCE);
- Archaeological Impact Assessment prepared by James Kyle of Archaeology and Built Heritage;
- Traffic Assessment and updated traffic count data prepared by Barrett Mahony Civil and Structural Consulting Engineers;
- Civil Infrastructure Report prepared by Barret Mahony Consulting Engineers (BMCE); and
- Verified Photomontages and Computer-generated imagery (CGIs) prepared by Digital Dimensions.

### 1.2 Scope of EIAR Addendum

The EIAR Addendum has been structured in line with the December 2022 EIAR to cover any updates to the following:

- Introduction;
- Project Description and Description of Alternatives;
- Planning and Policy Context;
- Population and Human Health;
- Biodiversity;

- Land Soil and Geology;
- Hydrology and Hydrogeology;
- Air Quality and Climate;
- Noise and Vibration;
- Landscape and Visual Assessment;
- Archaeology and Cultural Heritage;
- Material Assets; Traffic, Waste and Utilities;
- Risk Management;
- Interactions; and
- Mitigation and Monitoring Measures.

The EIAR Addendum will present any material changes to the baseline conditions, impact assessment and conclusions presented in the December 2022 EIAR as a result of the revised design. The list of inputs considered are detailed in Section 1.1 of this EIAR Addendum.

## 2 PROJECT DESCRIPTION AND DESCRIPTION OF ALTERNATIVES

In response to the request for further information received from Louth County Council, the project description has been updated since the previously submitted EIAR.

The changes to the Proposed Development include:

(a) a revised site layout comprising a substantially reduced quantum of retail/commercial development. The proposed development now comprises 3 no. units in total; 1 no. anchor retail supermarket store (Unit 1)(3,945sq.m); 1 no. DIY/Home store (2,800sq.m) and associated garden centre (700sq.m) (Unit 3); and 1 no. coffee shop unit (Unit 2)(210sq.m) with associated external seating;

(b) the deliveries/service areas associated with the proposed units have been relocated to the south and west of Unit 1 and the east of Unit 3;

(c) the introduction of a central landscaped plaza featuring external seating, planting and hardscaping and a landscaped walkway on the southern portion of the site where it interfaces with Barrack Lane. Indicative future pedestrian connection points are also shown between the site and Barrack Lane to the south.

(d) A total of 229 no. car parking spaces are provided to serve the proposed development, this is inclusive of 2 no. click and collect parking spaces, 18 no. accessible spaces and 11 no. parent and child spaces. A total of 58 no. bicycle parking spaces are also proposed on-site.

(e) revised hard and soft landscaping and signage;

(f) the provision of 2 no. substations on-site and 2 no. sprinkler tanks and associated pump rooms adjacent to Units 1 and 3; and

(g) all associated site development works necessary to facilitate the revised proposal.

The Proposed Development comprises a substantially reduced quantum of retail/commercial development compared to the December 2022 submitted application, and therefore will further strengthen the policies as outlined in the Retail Planning Guidelines 2012 and the Louth County Development Plan 2021-2027 (as varied) in that the Proposed Development assists

in securing the Development Plan's policies and objectives for this zoned land, whilst still adhering to the central provisions of the Retail Planning Guidelines and Development Plan policy in not impeding the town centre vitality objectives for core retail areas of Level 2 and Level 3 centres.

The Proposed Development re-design includes the introduction of a central landscaped plaza featuring external seating; and a landscaped walkway on the southern portion of the Site where it interfaces with Barrack Lane, therefore ensuring the successful integration between the district centre lands and the mixed used lands and fully in line with the Louth County Development Plan 2021-2027 policies and objectives.

A total of 229 no. no car parking spaces are now provided to serve the Proposed Development, this is inclusive of 2 no. click and collect parking spaces, 18 no. accessible spaces and 11 no. parent and child spaces. A total of 58 no. bicycle parking spaces are also proposed on-site. The reduction in car parking spaces ensure the Proposed Development will be in line and supports the climate actions policies and objectives of the National Climate Action Plan.

### 3 PLANNING AND POLICY CONTEXT

The re-design of the retail development ensures that the polices, objectives and goals of the Louth County Development Plan 2021-2027 and National Climate Action Plan will be met by the Proposed Development.

### 4 POPULATION AND HUMAN HEALTH

Taking into account the updated project description, revised site layout and information and reports referenced in Section 1.1 there has been no material change in the baseline scenario in relation to population and human health.

Chapter 4, Section 4.5.1.1 and 4.5.1.2 of the previously submitted EIAR assessed the human health and socio-economic impact of the Proposed Development during the Construction Phase. It states that:

*“There will be approximately 150 workers directly employed during the peak of the Construction Phase of the project. The Proposed Development will also create additional indirect employment for suppliers, drivers delivering supplies to and from the Site and workers on the Site utilising local shops and other businesses in the surrounding areas which will benefit the local economy. Therefore, the Proposed Development will have a moderate, positive impact in terms of additional direct and indirect employment and on the local socio-economic environment and will be short-term in duration.”*

There will be no reduction in the number of staff employed during the construction phase.

Chapter 4, Section 4.5.2.1 and 4.5.2.2 of the previously submitted EIAR assessed the human health and socio-economic impact of the Proposed Development during the Operational Phase. It states that:

*“Research undertaken by the applicant would indicate that a supermarket of the size proposed would employ up to 120 No. staff, with approximately 70% of these employed on a part-time basis. On the basis of this assumption, a figure of 78 no. full time equivalents (120x0.3+)*

*120x0.5x0.7) can be computed, equivalent to 1 No. worker per 44 m<sup>2</sup> Gross Floor Area (GFA) for the proposed development. As the food superstore comprises only 33% of the development, with the remaining non-food-based retail outlets typically employing 50% to 70% of the food superstore requirement (1 No. worker per 70m<sup>2</sup> GFA), this would result in an overall figure for the development of 1 No. worker per 61m<sup>2</sup> GFA. This will have a moderate, positive impact on human health.” (BMCE, 2022)*

The estimation of an overall employment figure of 1 no. worker per 61m<sup>2</sup> GFA still applies. Based on the further information and change in project description, the revised GFA for the Proposed Development is 7,655m<sup>2</sup>. This results in 125 Operational Phase employees which will not change the previous assessment of a moderate, positive impact on human health.

#### **4.1 Conclusion**

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to population and human health.

### **5 BIODIVERSITY**

Taking into account the updated project description, revised site layout and information and reports referenced in Section 1.1 there has been no material change in the baseline scenario in relation to biodiversity.

Chapter 5, Section 5.5.2.2 of the previously submitted EIAR assessed the impact of the landscape design on biodiversity. It states that:

*“The landscape design for the Proposed Development includes a native woodland mix along the southern boundary of the Site, species proposed here include Oak *Quercus sp.*, Scots pine *Pinus sylvestris*, Birch *Betula sp.*, Mountain ash *Sorbus aucuparia*, Holly *Ilex aquifolium*, Hazel *Corylus avellana* and Hawthorn *Crataegus monogyna* (Figure 5-12). On the northern site boundary, it is proposed to plant an open planting of narrow columnar trees (Downy birch *Betula pubescens* and Oak *Quercus robur*) combined with larger tree specimens such as Scots pine and Oak *Quercus petraea* and a understorey of Holly, Hazel, Hawthorn, Blackthorn *Prunus spinosa* and Guelder rose *Viburnum opulus*. The significant increase in native tree planting at the Site will have a positive, permanent, moderate impact at a local level and will maintain habitat connectivity around the margins of the Site into the future.”*

Based on the reduction in the number of retail units at the Site there will be an increase in open space at the Site. The updated landscape design includes abundant additional planting and a native woodland to the eastern corner of the Site. This woodland will be dominated by oak, scots pine, birch, ash, holly, hazel, hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and guelder rose (*Viburnum opulus*). The additional planting at the Site will have a positive, permanent, moderate impact on biodiversity at a local level, providing additional nesting, foraging, resting, commuting and roosting habitat for local fauna and improve habitat connectivity at the Site.

## 5.1 Appropriate Assessment (AA) and Natura Impact Statement (NIS)

An AA Screening Report and NIS have been prepared by Enviroguide Consulting, dated 12th October 2022 and 13th October 2022 respectively. Taking into account the updated project description, revised site layout and information and reports referenced in Section 1.1, there is no change to the conclusion of the submitted AA and NIS.

The following is extracted from the NIS accompanying the application:

*“This Natural Impact Statement details the findings of the Stage 2 Appropriate Assessment conducted to further examine the potential direct and indirect impacts of the Proposed Development planning application at the M1 Retail Park, Mell, Drogheda, Co. Louth, on the following European sites:*

- *River Boyne and River Blackwater SAC (002299).*
- *Boyne Coast and Estuary SAC (001957).*
- *Boyne Estuary SPA (004080).*

*The above sites were identified by a screening exercise that assessed likely significant effects on a range of impacts that have the potential to arise from the Proposed Development. The Appropriate Assessment investigated the potential direct and indirect effects of the proposed works during the Construction Phase, on the integrity and qualifying interests of the above European sites, alone and in-combination with other plans and projects, taking into account the site’s structure, function and conservation objectives.*

*Where potentially significant adverse effects were identified, a range of mitigation and avoidance measures have been proposed to negate them. Therefore, as a result of the complete, precise and definitive findings of this Appropriate Assessment; it has been concluded beyond any reasonable scientific doubt, that the Proposed Development will not have any significant adverse effects on the above or any European sites.*

*As a result of the complete, precise and definitive findings in this NIS, it has been concluded, beyond reasonable scientific doubt, that the Proposed Development will have no adverse effects on the qualifying interests, special conservation interests and on the integrity and extent of the River Boyne and River Blackwater SAC, Boyne Coast and Estuary SAC and Boyne Estuary SPA. Accordingly, the Proposed Development will not adversely affect the integrity of any European site.”*

## 5.2 Submissions

It is acknowledged that several submissions have been lodged with Louth County Council in respect of the Proposed Development. Table 5-1 provides a summary of the submissions relating to biodiversity.

Table 5-1 Submissions relating to biodiversity.

Submission subject	Response
Loss of habitat	Section 5.5.1.2 and Section 5.5.2.2 of the December 2022 EIAR fully addressed the loss of habitat at the Site and the potential impacts of the Proposed Development on biodiversity. The updated Site layout and landscape plan for the Site includes additional planting and open space which will have a positive impact on biodiversity at the Site.

### 5.3 Conclusion

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to biodiversity.

## 6 LAND, SOIL AND GEOLOGY

### 6.1 Introduction

The following information and reports have been taken into consideration for the updated Chapter 6 of the EIAR.

- Updated project description and site layout (including redline boundary) as referenced in Section 1.1
- Updated Civil Infrastructure Report by Barrett Mahoney (Barrett Mahoney, 2022) and accompanying drawing:
  - Site drainage drawings (surface, watermain and foul) by Barrett Mahoney: Drawings: MRE-BMD-00-00-DR-C-1000 to 1005, MRE-BMD-00-00-DR-C-1010 & MRE-BMD-00-00-DR-C-1050
- Drawings:
  - Site Plan prepared by MCA Architects: drawings MM1-MCA-00-00-DR-A-2000,
  - Ground Floor Plan prepared by MCA Architects: Drawings MM1-MCA-00-00-DR-A-3000 & MM1-MCA-00-00-DR-A-3001
  - Site Sections prepared by MCA Architects: Drawings MM1-MCA-00-00-DR-A-4000 and MM1-MCA-00-00-DR-A-5000 to 5003
- Ground Investigation Ireland Ltd (2022) Site Investigation Results.

### 6.2 Baseline Scenario

#### 6.2.1 Site Investigation Results

Ground investigation Ireland (GII) undertook four soakway tests across the Site. The results and logs are provided in Appendix 4 of the Civil Infrastructure Report (Barrett Mahoney, 2023). The soil and geology encountered during the investigation generally comprised of made ground, overlying sandy, gravelly clay. Sand was encountered in one location in the northwest of the Site (location SA01) beneath the made ground. Bedrock was not encountered.

Taking into account the updated project description, updated redline boundary, revised site layout and information and reports referenced in Section 1.1 there has been no significant change in the baseline scenario in relation to land and soil.

## 6.3 Potential Impacts

### 6.3.1 Construction Phase

Table 6-1 sets out the updates to the December 2022 EIAR Land and Soils chapter.

Table 6-1: Modified Impact taking account of updated design during construction phase

Section	Pervious Impact as per the submitted EIAR, dated December 2022	Modified Impact taking account of the report and information referenced in Section 6.1.
6.5.1.1.1 Land Take and Land-use	<i>The total land take area of the Proposed Development Site is 4.78Ha. The Proposed Development will require a change of use from undeveloped land to commercial land-use which is in accordance with the zone objective of the Louth County Council Development Plan, 2021 to 2027. Therefore, the change of land use will result in a "neutral" "slight" and "permanent" impact on the land at the Proposed Development Site.</i>	The revised land take for the Proposed Development Site is 4.82Ha. The change in land use will have the same impact.
6.5.1.1.5	<p><i>The Proposed Development will require the importation of aggregates during the Construction Phase as construction materials for filter drains and attenuation tank in accordance with the specification of the detailed design. The anticipated infill required during the construction is 16,720m<sup>3</sup>/hr.</i></p> <p><i>In the unlikely event that aggregate materials are sourced from unlicensed or unauthorized sources, it may result in the importation of contaminated materials, uncertified or material not suitable for use at the Proposed Development. In the unlikely event of the importation of contaminated materials onsite, there would be a 'negative', 'moderate to significant' and 'long term' impact on the receiving lands, soil and geology at the Proposed Development</i></p>	<p>The revised cut and fill analysis was undertaken for the proposed developed site based on redesign as follows:</p> <p>Cut volume will increase from 51,405m<sup>3</sup> to 58,448m<sup>3</sup></p> <p>Fill volume will reduce from 16,720<sup>3</sup> to 12,963m<sup>3</sup></p> <p>The overall potential impact does not change as a result in the change in quality if materials.</p>

There is no material changes to the impacts taking account of updated information for the following areas.

- Soil quality and contamination;
- Soil structure;
- Excavation of soil and bedrock
- Geological hazards;

- Indirect – excavation and removal of soil
- Indirect – importation of fill materials

### 6.3.2 Operational Phase

Table 6-2 sets out the updates to the operational phase effects as presented in the December 2022 EIAR.

*Table 6-2: Modified Impact taking account of updated design during operational phase*

Section	Pervious Impact as per the submitted EIAR, dated December 2022	Modified Impact taking account of the report and information referenced in Section 6.1.
6.5.2.1- Direct	<i>There will be no discharge to ground except for rainfall to open areas and rainfall to SuDs (through permeable paving, bio-retention and tree pits). Surface water runoff will be collected in newly constructed attenuation devices prior to discharging to the existing foul and surface water drainage, refer to Chapter 7 of this EIAR for additional information. Therefore, there will be a “neutral”, “imperceptible” and “permanent” impact on the receiving geological environment for the duration of the Operational Phase.</i>	There will be no discharge to ground through the SuDs. All surface water will be connected in attenuated devices and discharged to the existing foul and surface water drainage. Therefore, the impact assessment will not change.

## 6.4 Avoidance, Remedial and Mitigation Measures

### 6.4.1 Construction Phase

Section 6.6.1 of the submitted EIAR, dated December 2022 has detailed the required mitigation measures.

There has been no change to the specified avoidance, remedial and mitigation measures specified in Section 6.6.1.

### 6.4.2 Operational Phase

Section 6.6.2 of the submitted EIAR, dated December 2022 has detailed mitigation measures during the operational phase.

There has been no change to the specified avoidance, remedial and mitigation measures specified in Section 6.6.2 of the EIAR.

## 6.5 Residual Impacts

There has been no change in the residual impacts in relation to land, soil and geology after consideration of the reports and information specified in Section 6.1.



## 6.6 Monitoring

There are specific monitoring measures relating to the land, soil and geology outlined in the submitted EIAR. Additional monitoring measures are proposed for the construction and operational phase.

### 6.6.1 Construction

During the Construction Phase of the Proposed Development the following monitoring measures will be considered:

- Routine monitoring and inspections during refuelling, concrete works to ensure no impacts and compliance with avoidance, remedial and mitigation measures;
- Inspections and monitoring will be undertaken during excavations and other groundworks to ensure that measure that are protective of water quality are fully implemented and effective;
- Materials management and waste audits will be carried out at regular intervals to monitor the following:
  - Management of soils on-site and for removal offsite.
  - Record keeping.
  - Traceability of all materials, surplus soil and other waste removed from the Site; and
  - Ensure records are maintained of material acceptance at the end destination.

### 6.6.2 Operational Phase

Ongoing regular operation monitoring of the sustainable drainage systems (SuDs) measure will be undertaken throughout the lifetime of the Operational Phase of the Proposed Development.

## 6.7 Reports

It is acknowledged that a number of external reports have been prepared by Louth County Council and various statutory bodies. There are no comments directly related to the land, soil and geology.

## 6.8 Conclusions

The reports and information reference in Section 6.1 have been considered in relation to the modification in chapter 6 Land, Soils and Geology. The conclusions of the EIAR remain that there will be no likely significant residual impacts on land, soil and geology anticipated associated with the proposed development.

# 7 HYDROLOGY AND HYDROGEOLOGY

## 7.1 Introduction

The following information and reports have been taken into consideration for the updated to Chapter 7 of the EIAR.

- Updated project description and site layout (including redline boundary) as referenced in Section 1.1

- Updated Civil Infrastructure Report by Barrett Mahoney (Barrett Mahoney, 2022) and accompanying drawing:
  - Site drainage drawings (surface, watermain and foul) by Barrett Mahoney: Drawings: MRE-BMD-00-00-DR-C-1000 to 1005, MRE-BMD-00-00-DR-C-1010 & MRE-BMD-00-00-DR-C-1050
- Drawings:
  - Site Plan prepared by MCA Architects: drawings MM1-MCA-00-00-DR-A-2000,
  - Ground Floor Plan prepared by MCA Architects: Drawings MM1-MCA-00-00-DR-A-3000 & MM1-MCA-00-00-DR-A-3001
  - Site Sections prepared by MCA Architects: Drawings MM1-MCA-00-00-DR-A-4000 and MM1-MCA-00-00-DR-A-5000 to 5003
- Ground Investigation Ireland Ltd (2022) site investigation results

## 7.2 Baseline Scenario

### 7.2.1 Water Framework Directive Status

Chapter 7, Section 7.3.12 of the previously submitted EIAR sets out the water framework directive (WFD) status for rivers, groundwater and coastal waterbodies that have a potential hydraulic connection to the Site. The WFD status for the receiving waterbodies has been updated with the 2016-2021 data since the original EIAR was undertaken. Table 7-1 presents the previous and new WFD status for the waterbodies identified within a 2km radius of the Site and downstream of the Proposed Development.

Table 7-1: Water Framework Status Update

Waterbody Name	Waterbody Type	Water body: EU code	WFD water body status (2013-2018)	WFD Waterbody Status (2016-2021)
Tullyeskar_010	River	IE_EA_07T270880	Poor	Moderate
Stagrennan_010	River	IE_EA_07S320550	Moderate	Moderate
Drogheda Groundwater Body	Groundwater	IE_EA_G_025	Good	Good
Boyne Estuary	Transitional	IE_EA_010_0100	Moderate	Moderate
Boyne Estuary Plume Zone	Coastal	IE_EA_010_0000	Moderate	Moderate

Since the previous EIAR, the WFD status of the Tullyeskar\_010 waterbody has improved from poor to moderate. The other waterbodies status within a 2km radius or hydraulically connected have not changes.

### 7.2.2 Site Investigation

Ground investigation Ireland (GII) undertook four soakaway tests across the Site. The results are provided in Appendix 4 of the Civil Infrastructure Report (Barrett Mahoney, 2022). The results indicate that the ground is not suitable for infiltration. The drainage design has been updated, and the filter trenches, tree pits and permeable paving will be used for interception purposes only and will be connected to the surface drainage/ attenuation tank system via perforated pipe.

The soil and geology encountered during the site investigation generally comprised of made ground, overlying sandy, gravelly clay. Sand was encountered in one location in the northwest of the Site (location SA01). The soakaway pits were excavated to a maximum depth of 2.2meter below ground level (mBGL), bedrock was not encountered. Groundwater was encountered in one of the four holes at a depth of 2.1mBGL in the SAND encountered in SA01.

## 7.3 Potential Impacts

### 7.3.1 Construction Phase

Section 7.5.1.1 and Section 7.6.3. of the December 2022 EIAR concluded the following in relation to potential impacts relating to hydrology and hydrogeology:

#### Hydrogeological Flow Regime:

*Overall, it is considered that any impact on the hydrogeological regime within the aquifer is unavoidable and will be 'negative', 'imperceptible' and 'permanent' within a very localised zone of the aquifer only and there will be no impact on the overall hydrogeological regime of the receiving groundwater body and associated downgradient receptors.*

#### Worst Case Scenario – Water Quality

*In the event of a worst-case scenario such as a fuel spill or release of other hazardous compounds occurring near the stream works, this could result in a potential impact on groundwater or surface water in the absence of appropriate control and mitigation measures. Standard construction measures will be incorporated in the CEMP to be prepared by the Enviroguide taking cognisance of Natura Impact Statement (Enviroguide, 2022) which is submitted with this EIAR.*

*However, taking account of the avoidance and mitigation measures the worst-case scenario is deemed to be an unlikely scenario.*

There will be no change in the construction phase conclusions in relation to the impacts associated with the water environment, after consideration of the reports and information specified in Section 7.1.

### 7.3.2 Operational Phase

Section 7.5.2 of the submitted EIAR, dated December 2022., have been modified taking account of reports and information made available as outlined in Section 7.1. The modified impacts are provided in Table 7-2.

Table 7-2: Modified impacts taking account of the updated design

Section	Previous Impact as per the submitted EIAR, dated December 2022	Modified Impact taking account of the report and information referenced in Section 7.1.
7.5.2.1 Hydrogeological Flow Regime	<i>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. The impact of the Site Development on the</i>	There will be no infiltration to ground through SuDs features on site.  Given that the impermeable area across the Site will reduce from 3.165Ha to 2.2522Ha. There is a potential for increased recharge to any locally permeable lenses within the Site.

	<i>recharge regime will be “neutral” “imperceptible” and “long term”.</i>	However, overall the recharge to the aquifer will not be significantly affected given the low permeability clay present across the majority of the Site. The proposed impact is considered to be ‘neutral’ ‘imperceptible’ and ‘permanent’.
7.5.2.2 Drainage and Flood Risk	<i>There is no significant risk of flooding on the Proposed Development Site or no significant increased flooding risk to surrounding areas from the development. Therefore, the development is deemed acceptable from a flood risk assessment perspective.</i>  <i>The potential impact on flooding from the Proposed Development is “neutral”, “Imperceptible” and “long term”.</i>	No change.
7.5.2.3 Water Quality	<i>In the absence of the embedded design, avoidance and mitigation measures (i.e., petrol interceptor and SuDS measures) there would be a potential impact on the receiving water of the Tullyeskar River. Taking account of assimilation within the drainage network, a worst-case unmitigated discharge of surface water drainage could result in a ‘negative’, ‘moderate’ and ‘medium-term’ impact on water quality within the Tullyeskar River. There is no identified impact to the Boyne Estuary or Boyne Estuary Plume Zone.</i>	The updated layout will reduce the overall total impermeable cover from approximately 66% to 47% which increases the area for contamination to infiltrate to ground (i.e. in during a worst-case accidental fuel spill by-passing the petrol interceptor within SuDs). However, the subsoils beneath the Site have been shown to have low infiltration potential, the reduction in impermeable area will be used for landscaping (i.e. low risk areas where fuel spillage or accidental spillage is considered unlikely). There is no change in the overall potential impact for the scenario of worst-case in the absence of embedded design and mitigation measures.

## 7.4 Avoidance, Remedial and Mitigation Measures

### 7.4.1 Construction Phase

Section 7.6.1 of the submitted EIAR, dated December 2022 has detailed the required mitigation measures.

There has been no change to the specified avoidance, remedial and mitigation measures specified in Section 7.6.1.

### 7.4.2 Operational Phase

Section 7.6.2 of the submitted EIAR, dated December 2022 has detailed mitigation measures during the operational phase.

There has been no change to the specified avoidance, remedial and mitigation measures specified in Section 7.6.2 of the EIAR.

## 7.5 Residual Impact

Section 7.8 of the submitted EIAR, dated December 2022 states the following in relation to residual impacts:

*'There are no likely significant adverse residual impact on hydrology and hydrogeology anticipated regarding the Proposed Development'*

There has been no change in the residual impacts in relation to hydrology and hydrogeology, after consideration of the reports and information specified in Section 7.1.

## 7.6 Monitoring

Section 7.9 of the submitted EIAR, dated December 2022 has detailed the required monitoring results during the construction and operational phase. There is no change to the monitoring during the construction phase after consideration of the documents and information specified in Section 7.1. Ongoing operational monitoring and maintenance of drainage and the SuDs measures will be undertaken throughout the lifetime of the Operational Phase of the Proposed Development.

## 7.7 Reports

It is acknowledged that a number of external reports have been prepared by Louth County Council and various statutory bodies. Table 7-3 provides a summary of the reports relating to hydrology and hydrogeology.

Table 7-3: External reports relating to hydrology and hydrogeology

Report Subject	Summary
Department of Housing Local Government and Heritage	No relevant comments table <i>No comment/response.</i>
Uisce Eireann/Irish Water (UE/IW)	The UE/IW planning observation report notes the water connection and wastewater connection is feasible. The development is not likely to cause overloading potentially impacting receiving waters. The development is not likely to impact on IW drinking water source during construction and/ or operation.  <i>No comment/response.</i>
Transport Infrastructure Ireland	No relevant comments.  <i>No comments/response</i>
Louth County Council – Further Information Requests	Item 3(c)  <i>The applicant is requested to carry out ground investigation and determine groundwater levels. Infiltration rates are to be determine and if necessary, the outfall of the proposed infiltrations trenches shall be established and demonstrated on plan. Attenuation volume change are be established and calculations provided.</i>  Site investigated were undertaken by GII and included four soakaway test to a maximum depth of 2.2mBGL. Ground water was encountered in granular material (sand) in one location at 2.1mbgl. Infiltrations tests at three of the four locations show the ground is not suitable for infiltration. The surface water drainage design has been updated to incorporate the results of the assessment.

## 7.8 Conclusions

The reports and information referenced in Section 7.1 have been considered in relation to the modifications in Chapter 7 Hydrology and Hydrogeology. The conclusions of the EIA remain that there will be no significant residual impacts on hydrology and hydrogeology anticipated associated with this Proposed Development.

## 8 AIR QUALITY AND CLIMATE

Taking into account the updated project description, updated redline boundary, revised site layout and information and reports referenced in Section 1.1 there has been no material change in the baseline scenario in relation to air quality and climate.

In terms of associated impacts on air quality, Table 8-1 outlines the criteria that are prerequisite for an air quality assessment. According to the Institute of Air Quality Guidance Management (IAQM) guidance (2017), if none of the criteria are met, then there should be no requirement to carry out an air quality assessment for the impact of the development on the local area, and the impacts can be considered as having an insignificant effect.

Table 8-1: Indicative Criteria for Requiring an Air Quality Assessment (Source: IAQM, 2017)

Potential Change resulting from Proposed Development	Indicative Criteria to Proceed to an Air Quality Assessment
Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors	A change of LDV flows of more than 1000 Annual Average Daily Traffic (AADT)
Cause a significant change in Heavy Duty Vehicle (HGV) flows on local roads with relevant receptors	A change of HGV flows of more than 100 Annual Average Daily Traffic (AADT)
Realign roads, i.e., changing the proximity of receptors to traffic lanes	Where the change is 5m or more
Cause a change in Daily Average Speed (DAS)	Where the DAS will change by 10 km/h or more
Cause a change in peak hour speed	Where the peak hour speed will change by 20km/h or more.

Chapter 8, Section 8.5.1.2 of the Previously Submitted EIAR assessed impact of the Operational Phase of the Proposed Development using the UK DMRB screening model (Version 1.03c 2007). However, based on the revised annual average daily trips (AADTs) for the Operational Phase of the Proposed Development, the criteria presented in Table 8-1 have not been met by the Proposed Development; it is therefore considered unlikely for significant air quality impacts to occur as a result of the traffic flow associated with the Proposed Development, and an updated air quality assessment has been scoped out.

## 8.1 Conclusion

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to air quality and climate.

## 9 NOISE AND VIBRATION

Taking into account the updated project description, updated redline boundary, revised site layout and information and reports referenced in Section 1.1 there has been no material change in the baseline scenario in relation to noise and vibration.

Chapter 9, Section 9.5.1.2 and 9.5.1.3 of the previously submitted EIAR assessed the noise and vibration impact of the Proposed Development during the Construction Phase. It states that:

*“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 noise sensitive location (NSL1), a marginal exceedance of the 65dBA limit. Mitigation measures, as detailed in Section 9.6.1 will be employed to reduce the noise levels to below the 65dBA limit.”*

If the guidance documents outlined in the EIAR Chapter 9 are followed, the significance of effects due to construction vibration is slight.

Chapter 9, Section 9.5.2 of the previously submitted EIAR assessed noise and vibration impact of the Proposed Development during the Operational Phase. It states that the predicted significance of mechanical and electrical plant noise effects is slight, the predicted noise significance of deliveries noise is significant at noise sensitive location (NSL) no.2 without mitigation. There are no operational phase vibration impacts predicted.

Using the predicted development traffic flows, the predicted change in traffic noise levels at the R168 / Retail Park roundabout junction was calculated with the results from Table 9-12 of the previously submitted EIAR. The results of Table 9-12 of the previously submitted EIAR are presented in Table 9-1 below.

*Table 9-1 Predicted change in network traffic and road traffic noise levels (from original EIAR)*

R168 / Retail Park roundabout junction	Network Flows		Development Flows		Total Flows		Development flows as % of total flows		Predicted Change (dB)	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Day of opening (2025)	1038	1597	313	522	1351	2119	23.2	24.6	1.1	1.2
Design Year 1 (2030)	1123	1729	313	522	1436	2251	21.8	23.2	1.1	1.1
Design Year 2 (2040)	1204	1854	313	522	1517	2376	20.6	22	1.0	1.1

A revised Traffic and Transport Assessment (TTA) has been prepared by Barrett Mahony Consulting Engineers.

Based on this revised assessment, there has been a reduction in the Development Flows and Total Flows in network traffic for R168 / Retail Park roundabout junction.

Table 9-2 (based on Table 2-11 in the revised Traffic and Transport Assessment) details the Total Flows and the Development flows as % of total flows, as a result of the revised development.

*Table 9-2 Predicted change in network traffic and road traffic noise levels (from revised Traffic and Transport Assessment)*

R168 / Retail Park roundabout junction	Network Flows		Development Flows		Total Flows		Development flows as % of total flows	
	AM	PM	AM	PM	AM	PM	AM	PM
Day of opening (2025)	1038	1597	150	239	1188	1836	12.63	13.02
Design Year 1 (2030)	1123	1729	150	239	1273	1968	11.78	12.14
Design Year 2 (2040)	1204	1854	150	239	1354	2093	11.08	11.42



Chapter 9 of the previously submitted EIAR predicted a change in environmental noise levels of 1.2dB or less (see Table 9-1). A change of less than 3dB in environmental noise levels is generally considered to be imperceptible and therefore, Chapter 9 of the original EIAR concluded that the impact due to changes in the road network would not be significant. As there has been a reduction in the overall “Development flows as % of total flows”, the change in decibels is therefore less than originally predicted. Therefore, the significance of impacts due to changes in road network traffic noise is predicted to be not significant, or less, as a result of the revised development.

## 9.1 Conclusion

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to noise and vibration.

## 10 LANDSCAPE AND VISUAL ASSESSMENT

### 10.1 Introduction

The landscape and visual assessment has been updated to reflect the changes to the Proposed Development, together with the addition of three new viewpoints (represented as Viewpoint O, P and Q).

## 10.2 Potential Impacts

### Viewpoint A



Figure 10-1: Viewpoint A, N51, Existing View



Figure 10-2: Viewpoint A, N51, Proposed View

<b>Viewpoint A (Figures 10-34 and 10-35)</b>	
Location	N51
Coordinates	Latitude & Longitude:53.434118, -6.232860
Viewing distance to site boundary	500 meters
Direction of View	Northeast
Existing View	View from the N51 to the Retail Park. The existing buildings that are visible from this view, mark the landscape, being partially blocked by mostly shrub-vegetation next to the road.
Value of the View	Low
Visual Susceptibility	Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, visibility being blocked by existing buildings. The silhouette of the Proposed Development is represented in the image by a red line.

**Viewpoint B**



*Figure 10-3: Viewpoint B, N51 (Waterunder roundabout), Existing View*



*Figure 10-4: Viewpoint B, N51 (Waterunder roundabout), Proposed View*

<b>Viewpoint B (Figures 10-36 and 10-37)</b>	
Location	N51 (Waterunder roundabout)
Coordinates	Latitude & Longitude:53.434453, -6.231107
Viewing distance to site boundary	350 meters
Direction of View	North
Existing View	View from the N51, near the <i>Waterunder</i> roundabout, which takes up much of the visibility from this viewpoint. Some of the Retail Park buildings are visible behind the roundabout, but they are framed by large trees. On the left side of this point of view, a patch of vegetation, with great density, can be seen.
Value of the View	Low
Visual Susceptibility	Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, visibility being blocked by existing buildings. The silhouette of the Proposed Development is represented in the image by a red line.

### Viewpoint C



Figure 10-5: Viewpoint C, R168 (near Kiearns Motors), Existing View



Figure 10-6: Viewpoint C, R168 (near Kiearns Motors), Proposed View

<b>Viewpoint C (Figures 10-38 and 10-39)</b>	
Location	R168 (near Kiearns Motors)
Coordinates	Latitude & Longitude:53.433992, -6.23669
Viewing distance to site boundary	200 meters
Direction of View	North
Existing View	View from the R168, near <i>Kiearns Motors</i> , with <i>Maiones Toyota</i> and its car park being the most visible element. It's possible to see the dwellings that are to the north of the Proposed Development site and the tree-shrub hedge that is in front of them. The small tree in the center of the roundabout and the lamp posts along the road end up having great visual relevance from this point of view.
Value of the View	Low
Visual Susceptibility	Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	Low
Duration of Effects	Short-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Minor
Conclusion or Visual Impact of Proposed Development	The Proposed Development results in a minor visual impact since only part of its northeast front is visible, behind the dwellings – and is a continuance of the existing trends. All the foreground elements that make up this point of view end up maintaining a visual predominance over the Proposed Development. With the growth of vegetation that exists in front of the dwellings, this impact will eventually become imperceptible.

**Viewpoint D**



*Figure 10-7: Viewpoint D, R168, Existing View*



*Figure 10-8: Viewpoint D, R168, Proposed View*



<b>Viewpoint D (Figures 10-40 and 10-41)</b>	
Location	R168
Coordinates	Latitude & Longitude:53.433625, -6.23176
Viewing distance to site boundary	100m
Direction of View	North
Existing View	<p>View from the R168 to the west, with an empty lot dominating this point of view.</p> <p>Part of the dwellings located to the north of the Proposed Development site are visible, but almost completely hidden by the existing tree-shrub hedge.</p> <p>There is a metallic fence that exists between the road and the vacant terrain, that is included in the “B3 - Retail Park” according to the LCDP.</p> <p>Lighting posts and low voltage overhead cables end up having a negative visual relevance from this point of view.</p>
Value of the View	Low
Visual Susceptibility	Medium to Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	Negligible
Duration of Effects	Short-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Minor
Conclusion or Visual Impact of Proposed Development	<p>The Proposed Development ends up having a minimal visual expression, with only part of the building to the north being visible, behind the dwellings.</p> <p>The existing tree-shrub hedge will fully mitigate this visual impact in the short term.</p>

**Viewpoint E**



*Figure 10-9: Viewpoint E, Unnamed road (close to the LIDL parking lot), Existing View*



*Figure 10-10: Viewpoint E, Unnamed road (close to the LIDL parking lot), Proposed View*

<b>Viewpoint E (Figures 10-42 and 10-43)</b>	
Location	Unnamed road (close to the LIDL parking lot)
Coordinates	Latitude & Longitude:53.433508, -6.231024
Viewing distance to site boundary	60m
Direction of View	North
Existing View	View from an unnamed road, inside the Retail Park, next to LIDL. The view is occupied almost entirely by the northern part of the Proposed Development site. A land with herbaceous cover and spontaneous and dispersed arboreal and shrub vegetation is visible. However, the elements that have a greater visual scope from this point of view turn out to be part of the LIDL, the publicity sign of this structure (which ends up having the most negative visual impact in relation to the other elements of the landscape) and the lighting-posts.
Value of the View	Low
Visual Susceptibility	Medium to Low
Visual Sensitivity	Medium
Magnitude of Visual Changes	Medium
Duration of Effects	Medium-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Moderate
Conclusion or Visual Impact of Proposed Development	The Proposed Development turns out to have a moderate visual impact since it alters the view from this point. However, considering that the Site as a commercial/industrial context, it ends up blending into the landscape.  The vegetation proposed on the foreground of the Proposed Development, combined with the retained existing vegetation, can significantly mitigate this visual impact and, in the medium term, with the growth of vegetation, it is expected that the visual impact will end up being minor.

**Viewpoint F**



Figure 10-11: Viewpoint F, Unnamed road, Existing View



Figure 10-12: Viewpoint F Unnamed road, Proposed View

<b>Viewpoint F (Figures 10-44 and 10-45)</b>	
Location	Unnamed road
Coordinates	Latitude & Longitude:53.433483, -6.231580
Viewing distance to site boundary	75m
Direction of View	North
Existing View	<p>A viewpoint also within the Retail Park, like Point E, but overlooking a western part of the Proposed Development site.</p> <p>This view ends up being dominated by the presence of the green metallic fence that limits the property of the Site, and by the visible part of the "Cristal Clean M1 Retail Park" (namely the air conditioning system) that negatively impacts this view.</p> <p>Behind the fence it is still possible to see some scattered medium-sized trees.</p>
Value of the View	Low
Visual Susceptibility	Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	High
Duration of Effects	Medium-term
Quality of Effects	Neutral to Beneficial
Significance of Landscape and Visual Effects	Moderate to Significant
Conclusion or Visual Impact of Proposed Development	<p>With the introduction of the Proposed Development, the metal fence that conditioned the view to the south is removed, and the visual range will be wider.</p> <p>The impact of the Proposed Development turns out to be moderate to significant as it becomes the main object of this view. However, the visible part of the "<i>Crystal Clean M1 Retail Park</i>" continues to have the most negative visual impact.</p> <p>The car parking has a minor visual impact, being in a lower level in relation to the northern boundary of the Site.</p> <p>The visual impact of the new buildings and car parking will be partially mitigated in the medium term with the growth of the vegetation in the foreground.</p>

**Viewpoint G**



*Figure 10-13: Viewpoint G, R168 (Trinity St.), Existing View*



*Figure 10-14: Viewpoint G, R168 (Trinity St.), Proposed View*

<b>Viewpoint G (Figures 10-46 and 10-47)</b>	
Location	R168 (Trinity St.)
Coordinates	Latitude & Longitude:53.433261, -6.225613
Viewing distance to site boundary	5m
Direction of View	East
Existing View	<p>View from R168 (Trinity St.) west towards the Proposed Development site.</p> <p>The view is quite heterogeneous with many elements dissonant between them, being the one with the greatest visual impact (negative) the 3 posts and medium voltage overhead cables. The metallic fence and the electricity box also contribute to the lowest value of this view, with scattered vegetation, namely shrubs, still visible.</p>
Value of the View	Low
Visual Susceptibility	Low
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	Medium
Duration of Effects	Medium-term
Quality of Effects	Neutral to Beneficial
Significance of Landscape and Visual Effects	Moderate
Conclusion or Visual Impact of Proposed Development	<p>The visibility to the Proposed Development turns out to be almost negligible, with only a small part of the new building (garden center) and part of the car parking being visible. This visual impact will be almost mitigated with the growth of the proposed vegetation in the foreground, in the short to medium term.</p> <p>This visual impact can be considered beneficial as it screens the referred existing dissonant elements and gives a more homogeneous reading of this landscape.</p>

**Viewpoint H**



*Figure 10-15: Viewpoint H, R168 (Trinity St.), Existing View*



*Figure 10-16: Viewpoint H, R168 (Trinity St.), Proposed View*



<b>Viewpoint H (Figures 10-48 and 10-49)</b>	
Location	R168 (Trinity St.)
Coordinates	Latitude & Longitude:53.432431, -6.224518
Viewing distance to site boundary	285m
Direction of View	Southeast
Existing View	<p>View from the R168 (Trinity St.), but at a more south-east point from viewpoint G.</p> <p>The road ends up dominating the visibility of this point and also the hedge, mostly shrub-<i>strata</i>, next to the road that forms a visual barrier to the west.</p> <p>Part of some dwellings are still visible to the southeast of the Proposed Development site.</p>
Value of the View	Medium
Visual Susceptibility	Medium
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	Low
Duration of Effects	Short-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Minor
Conclusion or Visual Impact of Proposed Development	<p>The Proposed Development ends up having a minor visual impact, since only the highest part of one of the proposed buildings is visible.</p> <p>This visual impact will be mitigated, in the short term, with the growth of the proposed arboreal vegetation.</p>

**Viewpoint I**



*Figure 10-17: Viewpoint I, R168 (Trinity St.), Existing View*



*Figure 10-18: Viewpoint I, R168 (Trinity St.), Proposed View*

<b>Viewpoint I (Figures 10-50 and 10-51)</b>	
Location	R168 (Trinity St.)
Coordinates	Latitude & Longitude:53.431519, -6.223693
Viewing distance to site boundary	595m
Direction of View	Southeast
Existing View	<p>View from the R168 to the west, at a point further south-east, and close to the junction with Cement Road and the ALDI.</p> <p>View marked by the horizon line of the road with a separation between the road and the terrain to the west made by a metal fence and an arboreal hedge, still in formation, but which prevents much of the visibility to the background.</p> <p>Presence of dissonant elements in the landscape such as light poles and medium voltage poles.</p>
Value of the View	Medium
Visual Susceptibility	Medium
Visual Sensitivity	Medium-Low
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, visibility being blocked by existing vegetation. The silhouette of the Proposed Development is represented in the image by a red line.

**Viewpoint J**



*Figure 10-19: Viewpoint J, Slane Road, Existing View*



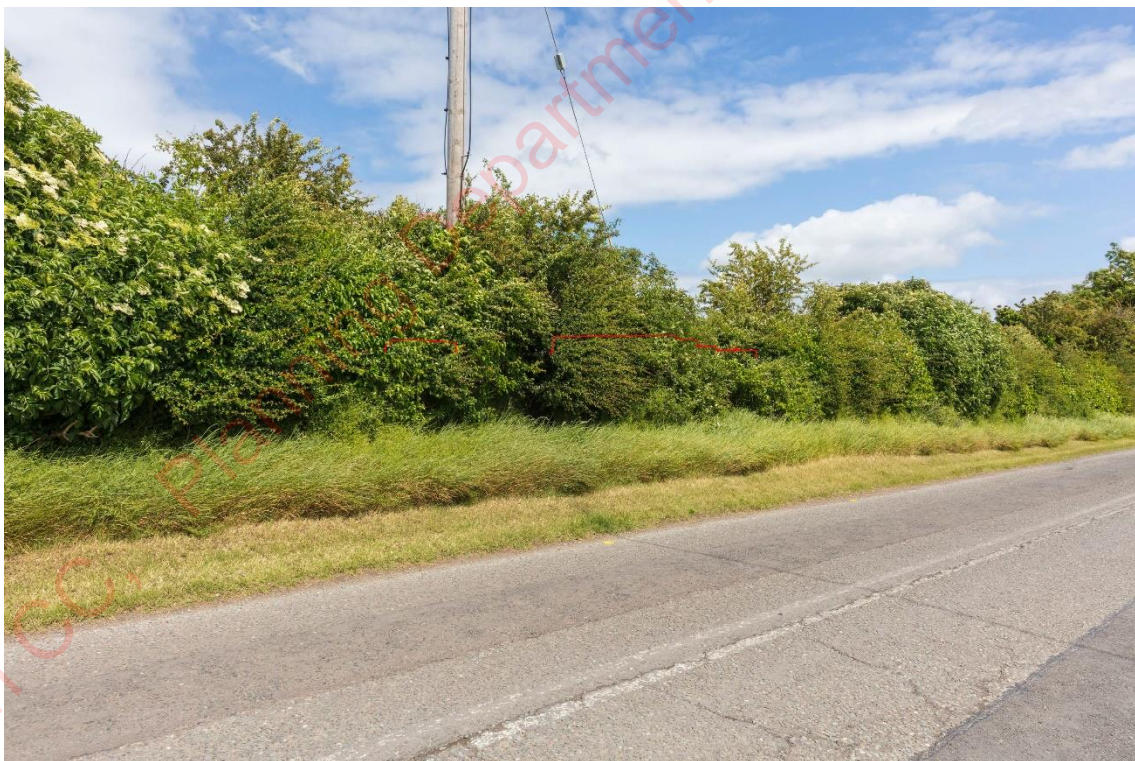
*Figure 10-20: Viewpoint J, Slane Road, Proposed View*

<b>Viewpoint J (Figures 10-52 and 10-53)</b>	
Location	Slane Road
Coordinates	Latitude & Longitude:53.431830, -6.23341
Viewing distance to site boundary	340m
Direction of View	South
Existing View	View from Slane Road, adjacent to <i>Oliver Plunketts GAA Club Louth</i> , to the north. There is no visibility to the north due to the presence of a shrub hedge of about 2/3 meters high next to the road.
Value of the View	Medium
Visual Susceptibility	Medium to High
Visual Sensitivity	Medium
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, visibility being blocked by existing vegetation. The silhouette of the Proposed Development is represented in the image by a red line.

**Viewpoint K**



*Figure 10-21: Viewpoint K, Slane Road, Existing View*



*Figure 10-22: Viewpoint K, Slane Road, Proposed View*

<b>Viewpoint K (Figures 10-54 and 10-55)</b>	
Location	Slane Road
Coordinates	Latitude & Longitude:53.432442, -6.232937
Viewing distance to site boundary	285m
Direction of View	Soutwest
Existing View	View from Slane Road, further west than Viewpoint J, at the intersection with Barrack Lane. The presence of a shrub-hedge, next to the road, prevents visibility to the East. The presence of a medium voltage pole, behind the mentioned hedge, turns out to be the most dissonant element of this view.
Value of the View	Medium
Visual Susceptibility	Medium to High
Visual Sensitivity	Medium
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, visibility being blocked by existing vegetation. The silhouette of the Proposed Development is represented in the image by a red line.

**Viewpoint L**



*Figure 10-23: Viewpoint L, Barrack Lane, Existing View*



*Figure 10-24: Viewpoint L, Barrack Lane, Proposed View*



<b>Viewpoint L (Figures 10-56 and 10-57)</b>	
Location	Barrack Lane
Coordinates	Latitude & Longitude:53.432806, -6.231496
Viewing distance to site boundary	5m
Direction of View	Southwest
Existing View	View from Barrack Lane, at a point near the southwestern edge of the Proposed Development site, and next to the only existing dwelling at this point. The tree-shrub hedge that exists on both sides of the road prevents visibility from either north or south.
Value of the View	Medium
Visual Susceptibility	Medium
Visual Sensitivity	Medium
Magnitude of Visual Changes	None
Duration of Effects	Medium-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Moderate
Conclusion or Visual Impact of Proposed Development	<p>There is a moderate visual impact considering the removal of the hedgerow on this southern limit of the Site. However, there isn't much visibility to the background considering the level difference between Barracks Lane and the level where the new buildings are predicted.</p> <p>The assessed visual impact is compensated by the introduction of the Proposed Development green structure in this area. This includes different vegetation strata (trees, shrubs and herbaceous) that will compensate the biodiversity loss in the medium to long-term. Considering this, a neutral assessment is predicted in relation to the Proposed Development.</p> <p>The Proposed Development also creates two direct access between the higher lever and Barracks Lane (which coincides with <i>Boyne Valley Camino</i>), one of them is visible in this view.</p>

**Viewpoint M**



*Figure 10-25: Viewpoint M, R168, Existing View*



*Figure 10-26: Viewpoint M, R168, Proposed View*

<b>Viewpoint M (Figures 10-58 and 10-59)</b>	
Location	R168
Coordinates	Latitude & Longitude:53.433497, -6.225955
Viewing distance to site boundary	20m
Direction of View	Southwest
Existing View	<p>View from R168, near a dwelling that is close to the northeast edge of the Proposed Development site.</p> <p>The building and garden of the property end up dominating this view.</p> <p>The hedgerow, that follows the road on the south side, greatly limits visibility to the background.</p> <p>However, there is still a section of the view, between the end of the house and the beginning of this hedge, that allows visibility to the Proposed Development site, namely the hedgerow at the northeast edge.</p>
Value of the View	Medium to Low
Visual Susceptibility	High
Visual Sensitivity	High
Magnitude of Visual Changes	Medium
Duration of Effects	Medium-term
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Minor
Conclusion or Visual Impact of Proposed Development	<p>The house and garden in the foreground remain the dominant elements of this view.</p> <p>The Proposed Development has a minor visual impact, as the proposed vegetation will mitigate the presence of the new buildings in the short-term.</p> <p>In the medium-term the vegetation will screen the visibility to the Proposed Development.</p>

**Viewpoint N**



*Figure 10-27: Viewpoint N, R168, Existing View*



*Figure 10-28: Viewpoint N, R168, Proposed View*

<b>Viewpoint N (Figures 10-60 and 10-61)</b>	
Location	Barrack Lane
Coordinates	Latitude & Longitude:53.433065, -6.225786
Viewing distance to site boundary	5m
Direction of View	North
Existing View	<p>View from a dwelling on the opposite side of Barrack Lane, on the southeast edge of the Proposed Development site.</p> <p>Although the stone wall, with a metal fence on top, is the dominant element in this view, there is still a considerable visual scope for the Proposed Development site.</p> <p>The tree-shrub hedge at the southern edge of the Site has many breaks, this being a section of about 50 meters without vegetation.</p>
Value of the View	Medium to Low
Visual Susceptibility	High
Visual Sensitivity	High
Magnitude of Visual Changes	High
Duration of Effects	Long-term
Quality of Effects	Beneficial
Significance of Landscape and Visual Effects	Moderate
Conclusion or Visual Impact of Proposed Development	<p>The proposed green structure within the Proposed Development site ends up becoming the dominant visual element in this point of view. In the medium to long term this will mitigate the proposed buildings.</p> <p>The demolition of the stone wall at the edge of the Site ends up increasing the visual range to the north but this visibility will become screened in the medium-term by the landscaping.</p> <p>In the medium-term the proposed buildings will also be screened. The proposed green structure will continue to dominate this point of view.</p>

**Viewpoint O**



*Figure 10-29: Viewpoint O, Knowth monument, Existing View*



*Figure 10-30: Viewpoint O, Knowth monument, Proposed View*

<b>Viewpoint O (Figures 10-62 and 10-63)</b>	
Location	Knowth monument
Coordinates	Latitude & Longitude: 53.42408, - 6.292849
Viewing distance to site boundary	6643.49 meters
Direction of View	Northeast
Existing View	View from within the <i>Knowth</i> monument area, to northeast, with a considerable visual range. The landscape is marked by a composition of open fields intersected by hedgerows. There is a considerable levels difference in the ground, providing an undulating ground panorama from this view towards the Site.
Value of the View	High
Visual Susceptibility	High
Visual Sensitivity	High
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, due to the screening of existing vegetation and the elevation that exists between this Viewpoint location and the Site.

**Viewpoint P**



*Figure 10-31: Viewpoint P, Newgrange monument, Existing View*



*Figure 10-32: Viewpoint P, Newgrange monument, Proposed View*



<b>Viewpoint P (Figures 10-64 and 10-65)</b>	
Location	Newgrange monument
Coordinates	Latitude & Longitude: 53.414187, -6282984
Viewing distance to site boundary	7333.3 meters
Direction of View	Northeast
Existing View	View from within the <i>Newgrange</i> monument area, to northeast. The dwelling in the foreground has the visual predominance from this viewpoint. The vegetation in the background blocks the visibility further north.
Value of the View	High
Visual Susceptibility	High
Visual Sensitivity	High
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, due to the screening of existing vegetation and the elevation that exists between this Viewpoint location and the Site.

**Viewpoint Q**



*Figure 10-33: Viewpoint Q, Dowth Passage Tomb, Existing View*



*Figure 10-34: Viewpoint Q, Dowth Passage Tomb, Proposed View*

<b>Viewpoint Q (Figures 10-66 and 10-67)</b>	
Location	Dowth Passage Tomb
Coordinates	Latitude & Longitude: 53.421410, -6.27163
Viewing distance to site boundary	4761.1 meters
Direction of View	Northeast
Existing View	View from within the <i>Dowth Passage Tomb</i> area, to northeast. The land formation in the foreground marks this view, being most of the visibility to the north screened by the tree line in the background.
Value of the View	High
Visual Susceptibility	High
Visual Sensitivity	High
Magnitude of Visual Changes	None
Duration of Effects	Temporary
Quality of Effects	Neutral
Significance of Landscape and Visual Effects	Imperceptible
Conclusion or Visual Impact of Proposed Development	The Proposed Development has no visual impact, due to the screening of existing vegetation and the elevation that exists between this Viewpoint location and the Site.

### 10.2.1.1 Visual Effects Conclusion

Table 10-1 below summarizes the duration, quality and significance of the visual effects.

Table 10-1 Visual Impact Assessment Results

Duration of the Effects	Viewpoints	Total	%
Permanent	–	0	0%
Long-term to Permanent	–	0	0%
Long-term	N	1	6%
Medium to Long-term	–	0	0%
Medium-term	E, F, G, L, M	5	29%
Short to Medium-term	–	0	0%
Short-term	C, D, H	3	18%
Temporary	A, B, I, J, K, O, P, Q	8	47%
<b>Quality of the Effects</b>			
Beneficial	N	1	6%
Neutral to Beneficial	F, G	2	12%
Neutral	A, B, C, D, E, H, I, J, K, L, M, O, P, Q	14	82%
Neutral to Negative	–	0	0%
Negative	–	0	0%
<b>Significance of Landscape and Visual Effects</b>			
Imperceptible	A, B, I, J, K, L, O, P, Q	8	47%
Minor to Imperceptible	–	0	0%
Minor	C, D, H, M	4	24%
Minor to Moderate	–	0	0%
Moderate	G, E, L, N	4	24%
Moderate to Significant	F	1	6%
Significant	–	0	0%
Profound	–	0	0%

It is concluded that in 47% of these viewpoints the visual impacts from the Proposed Development will be temporary, 18% in the short-term and 35% will be above short-term.

With regard to quality, 82% of the viewpoints are considered neutral, with 18% of the viewpoints being neutral to beneficial of beneficial.

Finally, 47% of the viewpoints are considered to have an imperceptible impact and 24% minor impact. 24% are considered to have a moderate impact and 6% moderate to significant impact.

In the viewpoints considered as having a visual impact, it will be important to understand what mitigation measures could be adopted in addition to those already foreseen in the project. Many of these measures involve the implementation and development of the proposed vegetation, which is of particular importance when considering these viewpoints. Therefore, special attention should be given to the proposed vegetation, considering the measures for installing the vegetation and the possibility of using plants with a larger size, and with more volume, so the mitigating effect can be more efficient.

### 10.2.2 Daylight and Sunlight assessment

Lawler sustainability carried out a detailed daylight and sunlight assessment for the Proposed Development. This report analysed the impact of the Proposed Development on the surrounding existing dwellings in terms of daylight and sunlight. It has been completed using the ModelIT, Radiance and Suncast applications within the IES Virtual Environment 2021 software.

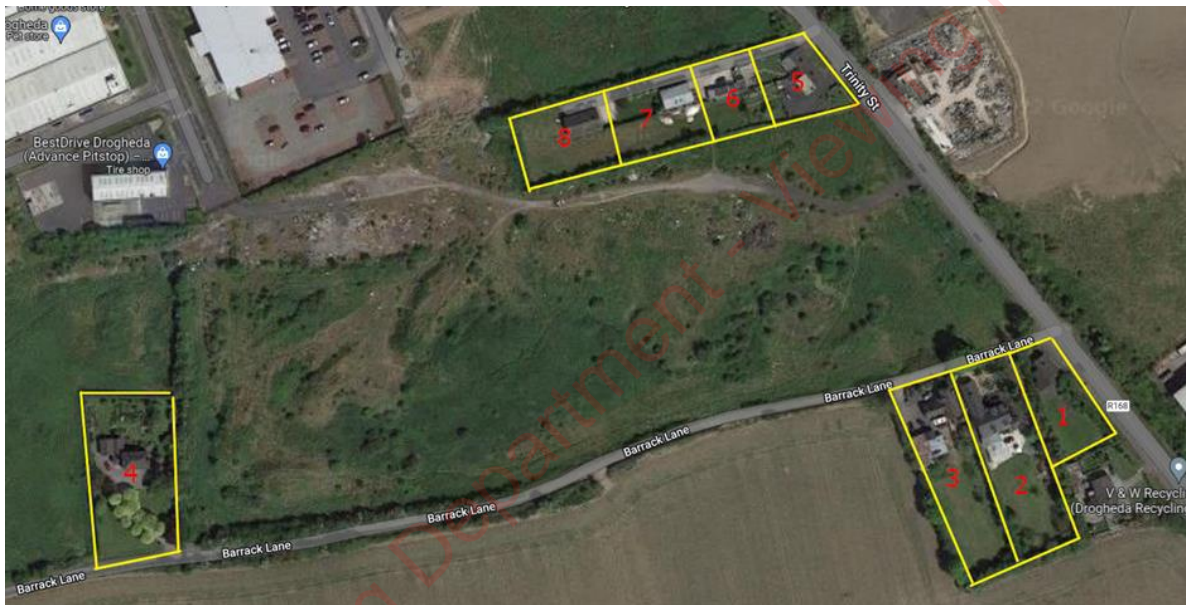


Figure 10-35: Neighbouring Properties Assessed. Source: Lawler Sustainability

The results demonstrate that an excess of 50% of the existing neighbouring private garden areas will receive at least 2 hours of sunlight, when the Proposed Development is completed (Figure 10-35).

The results also show that as least 50% of the Proposed Development amenity space will achieve a minimum of 2 hours of direct sun light on the 21st of March.

It is concluded that the Proposed Development has a negligible adverse impact on the surrounding properties.

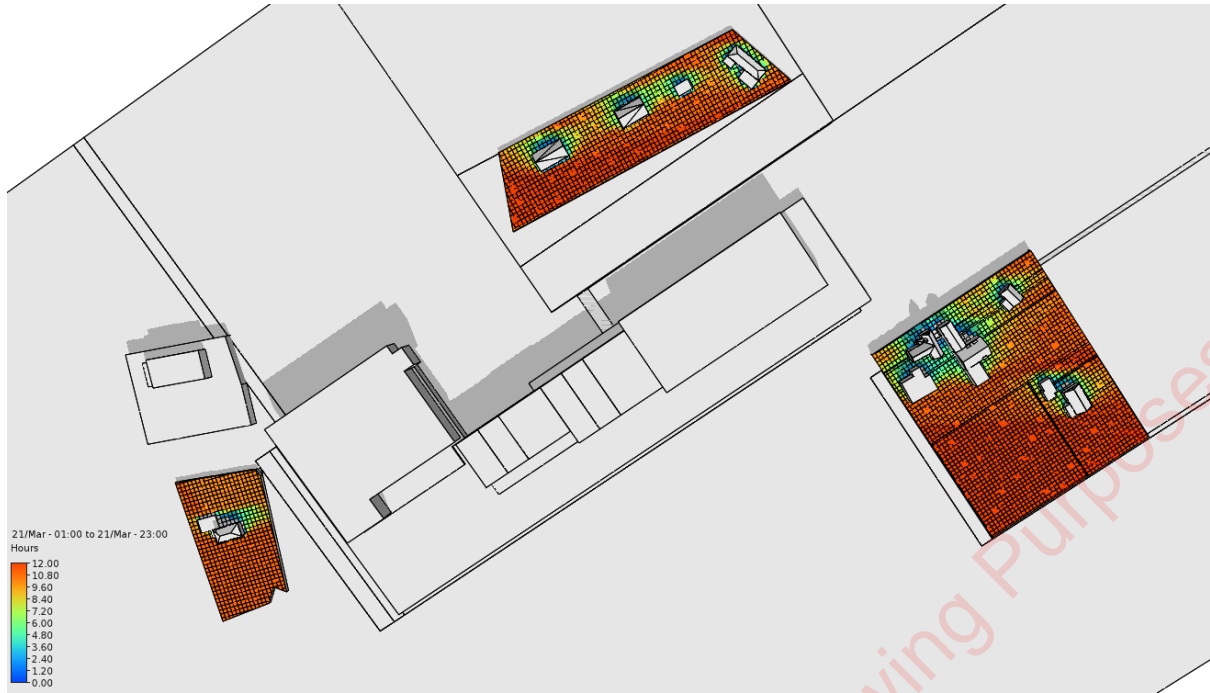


Figure 10-36: Annual Sunlight Probable Hours: Absolute Values on the 21st of March.  
Source: Lawler Sustainability

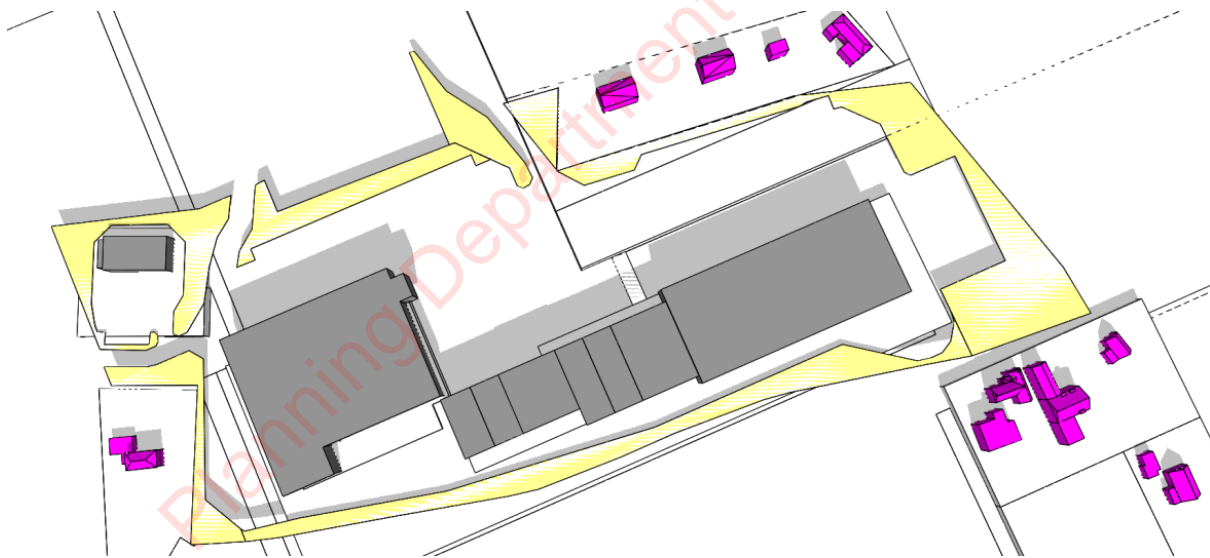


Figure 10-37: Public amenity spaces from the proposed retail unit. Existing residential buildings on magenta; proposed retail units on gray; public amenity spaces on yellow.  
Source: Lawler Sustainability

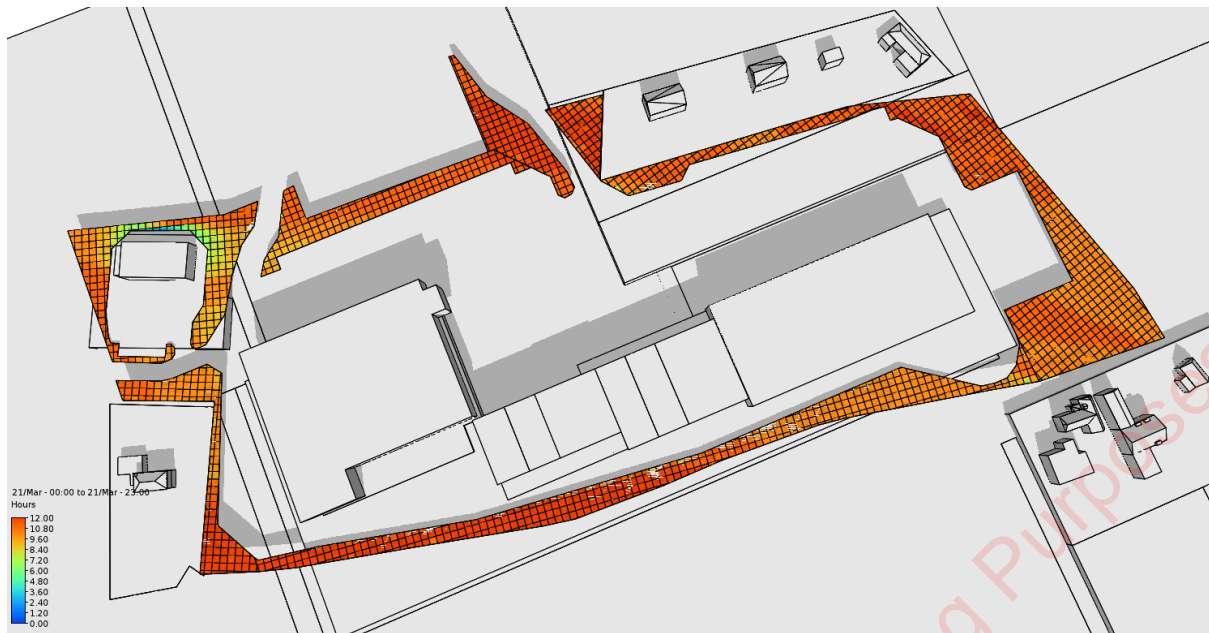


Figure 10-38: Annual Sunlight Probable Hours for Amenity Areas.

The coloured areas receive > 2 hours of sunlight on the 21st of March.

### 10.2.3 Potential Cumulative Impacts

Cumulative impacts can be described as impacts that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.

Given the zoning of the adjoining lands it is reasonable to expect additional development in close proximity, mainly at the west and north.

### 10.2.4 “Do Nothing” Impact

The do-nothing impact refers to the non-implementation of the Proposed Development. The primary effect of this would be that the impacts and effects identified would not directly occur. In the event that the development does not proceed it is very likely that the Proposed Development site would be developed in the future in line with its zoning. If the Site is left in its current state, it will be likely continued to be maintained in its current manner and hence a neutral impact will persist on the existing landscape.

## 10.3 Avoidance, Remedial and Mitigation Measures

The key landscape and visual mitigation measures used during the Construction Phase have been incorporated into the layout of the Site and design of the proposed buildings. The height of the buildings will be identical to those existing in the Retail Park, clad in a similar neutral colored material and will have a similar horizontal emphasis.

The measures proposed revolve around the implementation of appropriate site management procedures – such as the control of site lighting, storage of materials, placement of compounds, delivery of materials, car parking, etc. Visual impact during the construction phase will be mitigated somewhat through appropriate site management measures and work practices to ensure the Site is kept tidy, dust is kept

to a minimum, and that any locations close to public areas are kept free from building material and site rubbish.

Site hoarding will be appropriately scaled, finished and maintained for the period of construction of each section of the works as appropriate. To reduce the potential negative impacts during the construction phase, good site management and housekeeping practices will be adhered to. The visual impact of the site compound(s) and scaffolding visible during the construction phase are of a temporary nature only and therefore require no remedial action other than as stated above.

For those trees proposed for retention, all necessary mitigation measures will be put in place in order to prevent or reduce impact to its very minimum. Mitigation measures used will need to include the erection of protective fencing at the very start of the works, ground protection installation within root zones where fencing cannot be erected to enclose the entire root zones, monitoring of the site works by a qualified arboriculturist throughout the construction process and the use of tree friendly techniques and products for the construction process.

## **10.4 Residual Impacts**

No negative residual impacts in the context of landscape and visual impact are anticipated regarding this Proposed Development.

### **10.4.1 Construction Phase**

Notwithstanding the proposed mitigation measures proposed during the Construction Phase, it is considered that the initial development of the Site, including removal of vegetation and general construction activity will result in overall residual effects that are moderate, negative temporary impacts and ongoing residual effects that will be moderate, neutral short-term impacts by the closest receptors and reduce rapidly with distance to impacts which are minor/negligible, neutral short term impacts.

### **10.4.2 Operational Phase**

On completion, the disturbance and change associated with the construction stage will be gradually altered by the influence that the new development establishes on the character and visual context of its environs. In this regard it is considered that the Proposed Development will have a residual minor local impact on the landscape character of its environs and reduce rapidly with distance to impacts which are negligible, neutral long-term impacts.

## **10.5 Monitoring**

### **10.5.1 Construction Phase**

Landscape tender drawings and specifications were produced to ensure that the landscape work is implemented in accordance with best practice. This document will include tree work procedures, soil handling, planting and maintenance. The contract works will be supervised by a suitably qualified landscape architect. The planting works will be undertaken in the planting season after completion of the main civil engineering and building work.



Any construction works within close proximity to retained trees are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be retained by the principal contractor or site manager to monitor and advice on any works within the RPA of retained trees to ensure successful tree retention and planning compliance. The Arboriculturist is to make regular site visits to ensure that the tree protection measures are in place and adhered to.

### 10.5.2 Operational Phase

Monitoring of the mitigation measures will form part of the landscape management plan. Replacement trees, replacement planting and pruning measures will be captured in landscape maintenance plans and are intrinsically linked to the proposed mitigation measures. All landscape works will be in an establishment phase for the initial three years from planting. A landscape maintenance plan accompanies the planning application. Prior to completion of the landscape works, a competent landscape contractor will be engaged and a detailed maintenance plan, scope of operation and methodology will be put in place.

## 10.6 Conclusion

In terms of the landscape effects, some significant changes will occur on the Site, mainly with the removal of existing vegetation, earth movements and general construction activity to the implementation of the proposed buildings. These changes will 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). These landscape impacts will reduce rapidly with distance from the site boundaries, and intervening hedgerows, open park spaces, and existing buildings will further reduce the impacts to minor to negligible, negative and short term for the Construction Phase. It is concluded that the Proposed Development will, therefore, have a minor, negative and short to medium-term impact on the landscape character of the Site during the Construction Phase. The assessed negative impact is due to the construction activity already referred. It is not expected that the Operational phase of the Proposed Development will cause any negative impact. Considering the context of the Development Plan zoning, the Proposed Development is a continuation of existing trends in the local area. The potential landscape impacts will be neutral and long-term as a result of the Proposed Development. Considering the predicted evolution from a greenfield area (without any leisure activities or even open to the public) to an area interconnected with the existing logistical context, the recreational and green spaces created, the new physical connections between the Site and the southern area (Barracks Lane) and the visual connections predicted to the Boyne Bridge, it is considered that the landscape impacts in the proximity landscape are beneficial.

Regarding the visual impacts, 17 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, in 47% of these viewpoints the visual impacts from the Proposed Development will be temporary, 18% in the short-term and 35% will be above short-term. Regarding quality, 82% of the viewpoints are considered neutral, with 18% of the viewpoints being neutral to beneficial of beneficial. Finally, 47% of the viewpoints are considered to have an imperceptible

impact and 24% minor impact. 24% are considered to have a moderate impact and 6% moderate to significant impact. 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 landscape strategy for the Proposed Development will mitigate the minor adverse visual impacts caused in the short to medium term.

## 11 ARCHAEOLOGY AND CULTURAL HERITAGE

An Archaeological Impact Assessment (AIA) has been prepared in response to the request for further information (RFI) made by Louth County Council in relation to planning application Ref. 22/954. The AIA is presented as Appendix B to this EIAR addendum. The AIA has been prepared in direct response to part 4 of the RFI:

**Part 4.** *It is noted that the proposed development site is located within a significant archaeological landscape located approximately c.5 kilometres from the Bru na Boinne UNESCO World Heritage Site of international significance.*

The site was visited twice by the author of the AIA, Wednesday 8th February 2023 and again on 7th March 2023. The AIA states the following in relation to the feasibility of geophysical survey and archaeological test trenching on the Site.

*“During the site inspections the author examined the site for the feasibility of geophysical survey and archaeological test trenching. Topographically the land which the proposed site is located on is in stark contrast to the remaining natural, unaltered topography of the lands to the south and west of the proposed site area. Having inspected the site and consulted with geophysical survey specialists it is the opinion of the author that this type of survey is not feasible or prudent as part of any condition which might be associated with any grant of planning for the proposed development. However, should a positive grant of planning be made, it would be prudent to conduct some limited archaeological test trenching close to the southern boundary of the proposed development (Plate 4), as the estimated infilling depth there is 0.2-0.6m above the former ground level, and a recommendation to that end is made below.”*

There is previously imported topsoil/subsoil and builders’ rubble occupying the majority of the Site. These deposits negate the use of geophysical survey as a means of ascertaining the presence of archaeology on the subject site. Additionally, those same mass deposits severely impair the ability to archaeologically test trench the subject site. Therefore *“the impact that the proposed development might have on the archaeological resource cannot be accurately gauged at this point in time.”*

A comprehensive archaeological planning condition has been suggested by the author of the AIA as an attachment to any successful grant of planning permission and is detailed in Appendix B.

## 11.1 Conclusion

In conclusion, the archaeological impact assessment has concluded that there is *“not any identified issue which might prevent a successful grant of planning for the proposed development, it is the opinion of the author that an appropriately conditioned grant of planning permission should be made in this instance.”*

## 12 MATERIAL ASSETS; TRAFFIC, WASTE AND UTILITIES

### 12.1 Traffic

A revised Traffic and Transport Assessment (TTA) has been prepared by Barrett Mahony Consulting Engineers to address Item 3a within the request for further information arising from the application for the retail project in question (22/954).

Item 3a requests the Applicant to *“provide details of mitigation measures to bring the N51 / R168 / L6322 roundabout back to within 85% capacity in the design year (15 years post development).”* The applicant intends to address this issue by significantly reducing the quantum of development.

The conclusion of the revised TTA states:

- 1. The network analysis within the TTA indicates that all junctions analysed are presently operating within capacity and will continue do so in 2025 with the proposed development in place.*
- 2. It is demonstrated that by 2040, the projected year of opening plus 15 of the proposal, all 3 No. junctions analysed will remain within capacity. The 85% capacity threshold will not be breached, even assuming onerous network growth rates of just less than 22% in the intervening 18 years.*
- 3. It has been assumed that the proposed retail development will be in place by 2025. This is a very conservative assumption, as, in all likelihood, it will be closer to 2026 at the earliest before it is operational. The assumption of it being fully operational by 2025 is done to make the analysis as robust as possible.*

#### 12.1.1 Conclusion

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to traffic and transport.

### 12.2 Waste and Utilities

Taking into account the updated project description, updated redline boundary, revised site layout and information and reports referenced in Section 1.1 there has been no significant change in the baseline scenario in relation to waste and utilities.

Chapter 12, Section 12.2.5 of the previously submitted EIAR assessed the waste and utilities impact of the Proposed Development during the Construction Phase and Operational Phase. The impacts for the Power Supply, Information and Communications Technology, Local

Hydrology and Hydrogeology, Surface Water Drainage, Water Supply and Demand, Wastewater management and Waste Management will not change as a result of the revised development.

### **12.2.1 Conclusion**

There will be no change in the significance of the impact assessed in the previously submitted EIAR in relation to waste and utilities.

## **13 RISK MANAGEMENT**

No updates are considered necessary in respect of Chapter 13: Risk Management.

## **14 INTERACTIONS**

No updates are considered necessary in respect of Chapter 14: Interactions.

## **15 MITIGATION AND MONITORING MEASURES**

No updates are considered necessary in respect of Chapter 15: Mitigation and Monitoring Measures.

Low Cost Planning Department - Viewing Purposes Only!



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## Appendix A

Louth CC, Planning Department - Viewing Purposes Only!



## LOUTH COUNTY COUNCIL

### REGISTERED POST

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c/o Hughes Planning & Development Consultant  
85 Merrion Square  
Dublin 2  
D02FX60

Planning Section  
Town Hall  
Crowe Street  
Dundalk  
Co Louth  
A91 W20C  
Tel: 042/9335457

Date: 03/02/2023

### **FURTHER INFORMATION REQUEST**

**RE: Permission for development on lands south of existing M1 Retail Park, bound by Trinity St and Barrack Lane, for: (i) provision of 10 no. single storey retail units including a part-licensed anchor retail supermarket store (Unit1), a DIY/Home store, including a garden centre (Unit 10), 8 no. smaller retail/commercial units, including a cafe and pharmacy (Units 2-8) and 1 no. single storey Drive-Thru Restaurant/Cafe unit, including external seating area. A deliveries area, service yard and ground mounted plant 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 Unit 1. Deliveries will also be accommodated to the rear (south) of proposed Units 2 - 10, with a truck turning area provided to the rear (south) of Unit 10. Dock levellers will 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 development, including 23 no. accessible parking spaces, 2 no. click and collect spaces and 17 no. parent and child spaces. A bus parking area (4 spaces) is provided, 104 no. bicycle parking spaces are proposed. A partially covered pedestrian circulation space will be provided to the front of each of the units. (ii) Provision of 2 no. vehicular and pedestrian connection points to the existing M1 Retail Park to the north will provide access to the development; (iii) internal roads, footpaths and pedestrian crossings; (iv) trolley bays, signage, hard and soft landscaping, boundary treatments, Electric Vehicle Charging spaces 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. An EIAR and a NIS has been submitted with this application at Mell Drogheda Co Louth**

**REF. NO. 22/954**

Dear Sir/ Madam,

I refer to your application received on 09/12/2022 and wish to inform you that pursuant to Section 33 of the Planning and Development Act, 2000 (as amended), and Article 33 of the Planning and Development Regulations, 2001(as amended), Louth County Council requests you to forward the following Further Information:

1. It is the policy of the Retail Planning Guidelines 2012 and the Louth County Development Plan 2021-2027 (as varied) to promote a healthy competitive retail environment within County Louth and to maintain the vitality and viability of the town and village centres and their role as primary retail core areas and that new retail developments of significant scale should be targeted primarily within the core retail areas of Level 2 and Level 3 centres to promote town centre vitality. In line with this policy and the significant sustained levels of vacancy (17.4%) within Drogheda Town Centre, it is considered that the 8 no. smaller retail units (300sqm – 760sqm) proposed could be accommodated in the town centre and would be a more appropriate location for this retail floor space in compliance with the central provisions of the Retail Planning Guidelines and Development Plan policy.

Accordingly, the applicant is requested to submit revised plans which provides for a quantum of retail development that is significantly reduced. In this regard, you are advised that while the sequential test for the supermarket is accepted, the remaining quantum of retail development is considered unjustifiable having regard to the level of vacancy and possible units that could be occupied in the retail core of Drogheda. **(6 copies)**

2. The proposed urban design approach and the 'internalised configuration' of units on the site are considered inappropriate and fail to comprehensively consider the wider implications for the successful development and integration of the 'mixed use lands' and other economic and tourism opportunities in the immediate vicinity. Whilst there is an established retail park to the north of the site, the 'district centre' and 'mixed use' zoned lands should be developed so as to promote high quality urban streetscapes which exploit the key features intrinsic to this site and the immediate area in particular the views of the 'Boyne Bridge' and movement through these lands for both vehicles including bicycles and pedestrians in particular movements linked with the Camino trail. The Louth County Development Plan 2021-2027, as varied, promotes the achievement of high standards in design and to build sustainable, healthy communities where people can enjoy a quality of life. The B3 zoning is a retail park zoning that facilitates retail warehousing. The design approach of this retail park should not be replicated on the district centre lands. In this regard, a fundamental re-design and architectural response is required for the proposed development that ensures a new high quality urban streetscape that connects westwards along Barrack Lane towards the Boyne Bridge, the trail of the Camino. Future links and access points from Barrack Lane into the district lands also need to be considered. An overall framework which demonstrates how the district centre lands will integrate successfully with the



mixed use lands should be provided along with a supporting rationale for the design approach which demonstrates adherence to the County Development Plan policy objectives. Whilst the development of the proposed lands is acceptable in principle, it should not be to the detriment of the wider community by prejudicing the coherence in achieving high quality urban design or strategic linkages/ movement in the wider area. The design response and scale of development proposed should also be cognizant of the concerns raised in Item 1 and the infrastructural concerns raised in Item 3 of this further information. **(6 copies)**

3. (a)The applicant is requested to provide details of mitigation measures to bring the N51/R168/L6322 roundabout back to within 85% capacity in the design year (15 years post development). Plans and sections are to be provided for the proposed works to the roundabout to achieve the improved capacity identifying changes needed to cycleways and footpaths and identifying the landholdings that will be impacted by the proposed changes.

(b)The applicant is requested to provide plans to facilitate the widening of Barrack Lane along the full site frontage. The plans will contain the set back of the existing wall and hedge along the entire Barrack Lane frontage a distance of 5m generally from the road edge and the area shall be topsoiled level with the existing road. Cross sections are to be provided detailing the level of internal service road and Barrack lane to scale. Due consideration should be given to the urban design response and provision of an active streetscape along Barrack Lane.

(c)The applicant is requested to carry out ground investigation and determine ground water levels. Infiltration rates are to be determined and if necessary the outfall for the proposed infiltration trenches shall be established and demonstrated on plan. Attenuation volume changes are to be established and calculations provided. **(6 copies)**

4. It is noted that the proposed development site is located within a significant archaeological landscape located approximately c.5 kilometres from the Brú na Bóinne UNESCO World Heritage Site of international significance. The Planning Authority notes the high archaeological potential of the proposed development site where multiple recorded monuments are located within the wider landscape. It is also noted that the proposed development is located in proximity to two Recorded Monuments LH024-010001-Class: Ritual site - holy well and LH024-010002- Class: Ritual site - holy/saint's stone, both of which are subject to statutory protection in the Record of Monuments and Places, established under section 12 of the National Monuments (Amendment) Act 1994. Given the scale, extent and location of the proposed development it could impact on subsurface archaeological remains.

In line with national policy, see Section 3.6 of the Frameworks and Principles for the Protection of the Archaeological Heritage 1999, it is considered appropriate that an Archaeological Impact Assessment, as outlined below,

should be prepared to assess any impact on archaeological remains within the proposed development site.

#### Archaeological Investigations

- a. The applicant is required to engage the services of a suitably qualified archaeologist to carry out an archaeological assessment of the development site. No sub-surface developmental work, including geotechnical test pits, should be undertaken until the archaeological assessment has been completed and commented on by this Department.
  - b. The archaeologist shall carry out any relevant documentary research and inspect the development site. As part of the assessment a visual impact assessment of the proposed development should be carried out designed to assess the visual impacts of the proposed development on the Brú na Bóinne UNESCO World Heritage Site.
  - c. A geophysical survey should be carried out to be followed by a programme of test excavations which should be carried out at locations chosen by the archaeologist (licensed under the National Monuments Acts 1930-2004), having consulted the site drawings and the National Monuments Service of the Department of Housing, Local Government and Heritage.
  - d. Having completed the work, the archaeologist shall submit a written report stating their recommendations to the Planning Authority and to the Department of Housing, Local Government and Heritage. Where archaeological material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required. **(6 copies)**
5. Applicants are required to promote and support direct effective climate action policies and objectives that seek to improve climate outcomes within their developments. The applicant is invited to set out how the proposed development accords with National Climate Action policies. Particular regard should be given to the scale and quantum of development sought which is dependent on the use of the private car. **(6 copies)**
6. The applicant is requested to submit revised newspaper & site notices as the above further information will result in a significant alteration from the original proposal in relation to site size, site layout, development location or description, etc, in accordance with Article 35, 1(c), of the Local Government (Planning & Development) Regulations, 2006, which include reference to these alterations. Where revised newspaper and site notices are required the applicant shall submit in writing a description of the significant alterations e.g. provision of a Wastewater Treatment System, amendment to site size, site layout etc. to provide clarity and to update the details previously submitted under Section 9 'Description of Proposed Development' on the planning application form. **(1 original, 2 copies)**

The 4 week period for making a decision shall not commence until this request for Further Information has been **fully complied with.** If this request

is not complied with within the period of 6 months from the date of this notice, the application shall be declared withdrawn.

The applicant is requested to attach a schedule of all documents being submitted in response to the further information request. **(1 copy)**

This matter is being dealt with by **Brian Brooks** who can be contacted on 042-9335457.

Yours faithfully,

---

**Amy Duffy**  
**Planning Section**

A response in writing is required. When Further Information is submitted, if you do not receive an acknowledgement from the Planning Authority within 7 days, please contact the Planning Office, Town Hall, Crowe Street, Dundalk. Tel: 0429335457.

## Appendix B

Louth CC, Planning Department - Viewing Purposes Only!

**Archaeological Impact Assessment**

**M1 Retail Park  
Waterunder  
Mell  
Drogheda  
County Louth**

**Louth County Council planning ref. 22/954**

By

**James Kyle BSc HDip MIAI**  
*Archaeology and Built Heritage*  
Spade Enterprise Centre  
St. Paul's Smithfield  
North King Street  
Dublin 7

On behalf of

**BPM GP3 Ltd**  
O'Connell Bridge House  
27/8 D'Olier St  
Dublin 2

13<sup>th</sup> July 2023

**Archaeology  
and Built Heritage**

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Louth CC, Planning Department - Viewing Purposes Only

## 1 Introduction

- 1.1 This archaeological impact assessment has been prepared by James Kyle of Archaeology and Built Heritage Ltd. to outline and assess the risk of impact, if any, to the archaeological resource from the proposed development of the site adjacent to the existing M1 Retail Park, at Mell, Drogheda, County Louth (Figure 1 & 2). The proposed site is located to the immediate south of the existing M1 Retail Park lands and a domestic dwelling with associated garden, to the east it is bounded by the R168 (Trinity Street), Barack Lane to the south and by a partial hedgerow to the west. The proposed site is located on the south facing, upper slopes of the Boyne River valley, 600m north and upslope from the river itself. The land which the proposed development occupies is presently overgrown with grass and small shrubs, whilst the natural contours of the hill, and therefore the original ground level, have been heavily obscured by 3-4m of mixed deposited materials, which were accumulated directly from the post c.2005 development of the existing M1 Retail Park to the immediate north (see below).

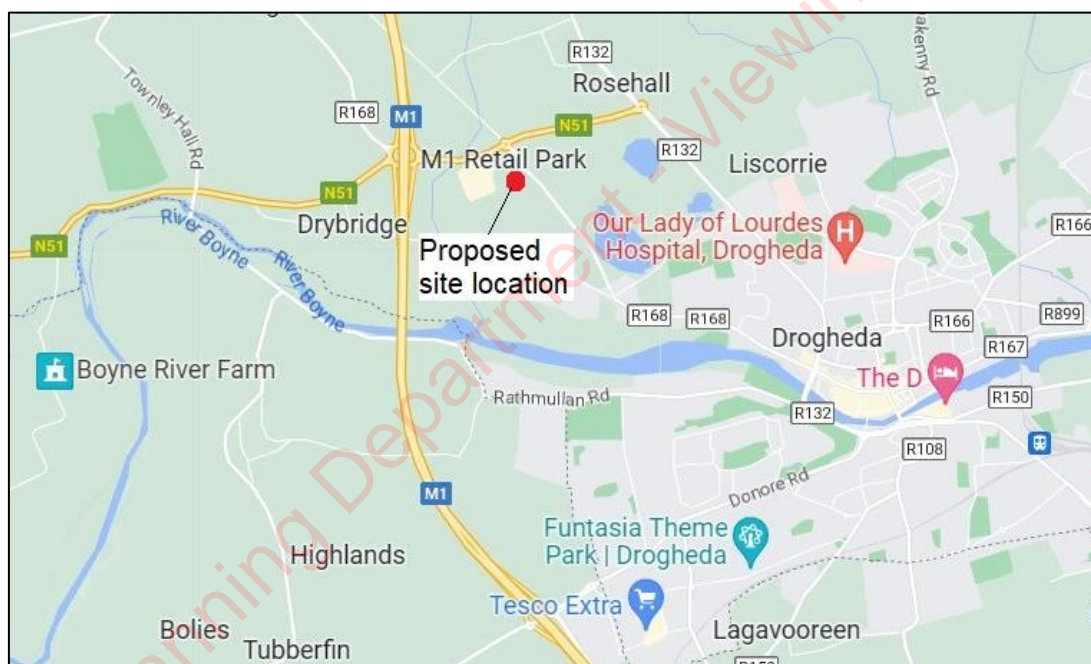


Figure 1 Proposed site location (Google Maps)

- 1.2 Whilst the statutory RMP does not list any known sites within the proposed site boundaries, at its nearest edge the proposed development is located 20m to the northwest of two recorded monuments; LH024-010001, a holy well and LH024-010002 a holy/saint's stone, both of which are associated with St. Patrick. Furthermore, there are multiple sites located in close proximity (500m) to the proposed development; to the south the Ringfort LH024-087, to the north the Ringfort LH024-089 and multiple sites which were excavated in advance of the construction of the adjacent M1 Northern Motorway in the early 2000s: the Ring Barrow LH024-046, the Fulacht Fiadh LH024-050 and the complex of archaeological sites in the area of Junction 10 of the M1; the cremation pit LH024-055, the Enclosure LH024-063, the Ring Barrow LH024-062 and the Burial Ground LH024-054. Thus, the proposed site is obviously located within a dense



archaeological landscape, with twenty-three currently known sites listed by the statutory RMP with 1.5km of the proposed development site. That density serves to underline the fact that the proposed development site is located within an archaeological landscape of considerable significance, as it is approximately 2.6 km northeast of the nearest edge of the core area of the UNESCO World Heritage Site of Brú na Bóinne<sup>1</sup> (see below) and 1km northeast the nearest edge of the protective buffer zone which surrounds that internationally significant archaeological complex in County Meath.

The proposed development site is therefore deemed by the author to be of high archaeological potential due to several factors: the multiple recorded monuments which are located within the immediate surrounding landscape, the proximity of the subject site to the World Heritage site and the adjacent archaeological excavation of a complex multiperiod site, which was undertaken to facilitate the construction of the adjacent, existing M1 Retail Park to the North (McQuaide 2005).



Figure 2 View of proposed development lands, with site outline in red, facing southeast (MCA Architects)

- 1.3 The 780-ha area core of the World Heritage property at Brú na Bóinne encapsulates the attributes for which an archaeological site or complex of sites of this magnitude and importance are inscribed on the World Heritage List. In addition to the large passage tombs of Knowth, Newgrange and Dowth, there are 90 recorded monuments – as well as an unknown quantity of as yet unrecorded sites – which remain scattered across the ridge above the Boyne and over the low-lying areas and floodplain closer to (the present course of) the areas rivers.

The buffer zone surrounding the 780-ha core is comprised of 2,500 hectares, with the boundary lines respecting carefully mapped views into and out of the property. The subject site is located

<sup>1</sup> [Layout: Bru Na Boinne Map 8.1 \(meath.ie\)](http://meath.ie)

2.6km northeast of the nearest edge of the core of the World Heritage Site and 1km northeast of the nearest edge of the buffer zone which surrounds the core.

- 1.4 This archaeological impact assessment (AIA) has been prepared in direct response to the request for further information made by Louth County Council on foot of the application for planning permission (22/954) made by BPM GP3 Ltd to develop the proposed site. This AIA has been prepared in line with Section 3.6 of the Framework and Principles for the Protection of the Archaeological Heritage (1999) and seeks to satisfy that request by the planning authority for further information.

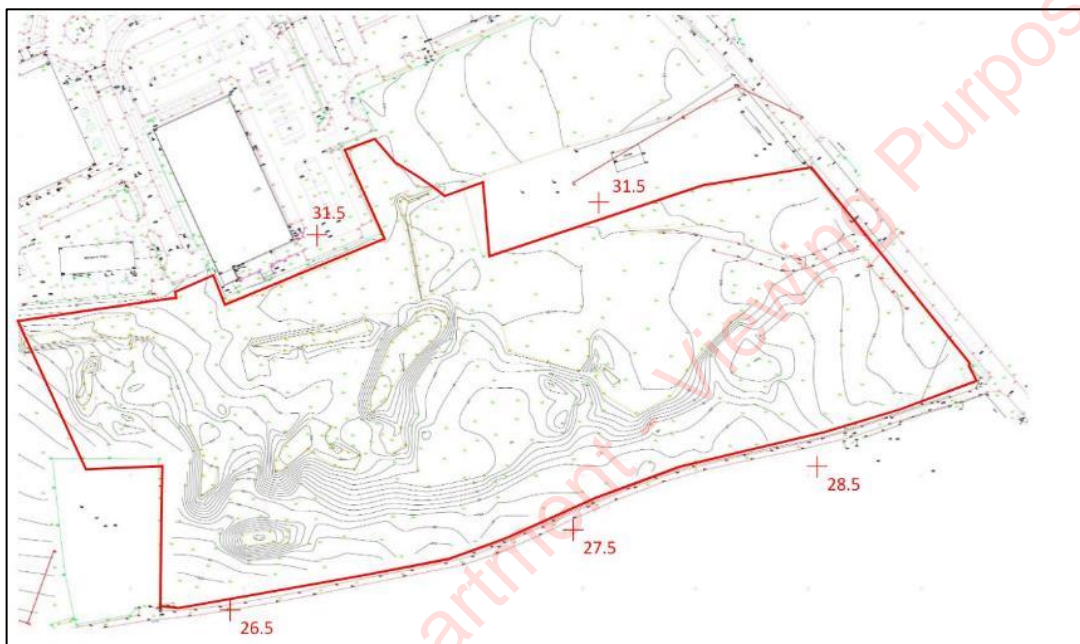


Figure 3 Contour map of proposed development site showing possible extent of built-up material (MCA Architects)



Figure 4 Plan of proposed development (MCA Architects)

## 2 Development and planning background

2.1 Planning permission has been sought under Louth County Council Reg. Ref. 22954 by BPM GP3 Limited for development on lands to the south of the existing M1 Retail Park, bound to the east by Trinity Street and to the south by Barrack Lane, Waterunder, Mell, Drogheda, Co. Louth. The development applied for consisted of:

A retail/commercial development comprising: (i) provision of 10 no. single storey retail units 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 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), including an external seating area. A deliveries area, service yard and ground mounted plant 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 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/commercial 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, hard and soft landscaping, boundary treatments, Electric Vehicle Charging spaces, 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. This application is accompanied by an Environmental Impact Assessment Report and a Natura Impact Statement.

2.2 Significant Further Information has been submitted and consists of: (a) a revised site layout comprising a substantially reduced quantum of retail/commercial development. The proposed development now comprises 3 no. units in total; 1 no. anchor retail supermarket store (Unit 1)(4,085sq.m); 1 no. DIY/Home store including a garden centre (Unit 3)(2,800sq.m); and 1 no. coffee shop unit (Unit 2)(210sq.m) with an associated external seating area to the south and west of the unit. (b) the deliveries/service areas associated with the proposed units have been relocated to the south and west of Unit 1 and the south and east of Unit 3; (c) the introduction of a central landscaped plaza featuring external seating, planting and hardscaping; and a

landscaped walkway on the southern portion of the site where it interfaces with Barrack Lane. Indicative future pedestrian connection points are also shown between the site and Barrack Lane to the south. (d) A total of 229 no. no car parking spaces are provided to serve the proposed development, this is inclusive of 2 no. click and collect parking spaces, 18 no. accessible spaces and 11 no. parent and child spaces. A total of 58 no. bicycle parking spaces are also proposed on-site. (e) revised hard and soft landscaping and signage; and (f) all associated site development works necessary to facilitate the revised proposal.

- 2.3 This archaeological impact assessment (AIA) has been prepared in direct response to the request for further information (RFI) made by the planning authority, in this instance Louth County Council, on foot of the application for planning permission on the site (Ref. 22/954). Part 4 of that request for additional information pertains to an archaeological impact assessment of the proposed site *viz*:

**Part 4.** It is noted that the proposed development site is located within a significant archaeological landscape located approximately c.5 kilometres from the *Bru na Boinne* UNESCO World Heritage Site of international significance.

The Planning Authority notes the high archaeological potential of the proposed development site where multiple recorded monuments are located within the wider landscape. It is also noted that the proposed development is located in proximity to two Recorded Monuments LH024-010001-Class: Ritual site – holy well and LH024-010002- Class: Ritual site - holy/saint's stone, both of which are subject to statutory protection in the Record of Monuments and Places, established under- section 12 of the National . Monuments (Amendment) Act 1994.

Given the scale, extent and location of the proposed development it could impact on subsurface archaeological remains. In line with national policy, see Section 3.6 of the Frameworks and Principles for the Protection of the Archaeological Heritage 1999, it is considered appropriate that an Archaeological Impact Assessment, as outlined below, should be prepared to assess any impact on archaeological remains within the proposed development site.:

#### *Archaeological Investigations*

- a. The applicant is required to engage the services of a suitably qualified archaeologist to carry out an archaeological assessment of the development site. No sub-surface developmental work, including geotechnical test pits, should be undertaken until the archaeological assessment has been, completed and commented on by this Department.
- b. The archaeologist shall carry out any relevant documentary research and inspect the development site. As part of the assessment a visual impact assessment of the proposed development should be carried out designed to assess the visual impacts of the proposed development on the *Bru na Boinne* UNESCO World Heritage Site.
- c. A geophysical survey should be carried out to be followed by a programme of test excavations which should be carried out at locations chosen by the archaeologist (licensed

under the National Monuments Acts 1930-2004 ), having consulted the site drawings and the National Monuments Service of the Department of Housing, Local Government and Heritage.

d. Having completed the work, the archaeologist shall submit a written report stating their recommendations to the Planning Authority and to the Department of Housing, Local Government and Heritage. \_ Where archaeological material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required. (6 copies).

- 2.4 Following consultation between Archaeology & Built Heritage Ltd. and the National Monuments Service it was agreed that neither a program of Geophysical Survey nor Archaeological Testing would not be feasible for this site due to the build-up of materials which currently exist on the site. Likewise, to attempt either would incur prohibitive costs associated with removal of those materials, something which would not be pertinent prior to any successful grant of planning. Should a successful grant of planning be made in this case then it is likely that a full suite of archaeological investigations will be conditioned as part of that grant and case relevant mitigatory measures are suggested to that end as part of this report (see below).

### 3 Historical and archaeological background

#### 3.1 Introduction

The townland of Mell or *Mheille as Gaeilge*, is located in the parish of Tullyallen, part of the Barony of Ferrard, in the County of Louth. The name is not as one might expect a derivative of Mellifont, the fact that the name appears as a grange (*et grangiam de Melle*) in one of the oldest charters of the Abbey, dating to 1238 AD<sup>2</sup>, is taken as proof that the name predates that of Mellifont Abbey, therefore the latter is named after the former. This is in keeping with other examples of Cistercian monastic foundations where the pre-existing local name is adapted to become the Abbey name, in this case the similarity between the Gaelic *Mheille* and the French *Miel* (honey) are obvious and an easy co-option by the Cistercian order.

#### 3.2 Prehistoric Period

##### 3.2.1 Paleolithic Period c.3,300,000-9,000 BC

The Paleolithic (*Old Stone Age*) period is represented by perhaps the poorest quantum of material remains pertaining to any period of human history on the island of Ireland, however that dearth serves to undermine the potential importance of some of the material that potentially pertains to the period. During the excavation of the quarry, 200m southwest of the subject site, in the late 1960's the eminent Frank Mitchell of Trinity College Dublin uncovered the 'Mell Flake' amongst a layer with glacial origins, the flint bearing "Mell Gravel", the name given to the flint nodule rich deposit in this area of south Louth. Mitchell posits the flake as being 'Munsterian/Wolstonian' and therefore Middle Pleistocene in date (the Munsterian period spans approximately 300,000 to 132,000 years before present, whilst the Wolstonian spans from approximately 374,000 until 130,000 years ago). Therefore, the flake is one of the most significant and potentially the oldest single archaeological find made so far on this island.

##### 3.2.2 Mesolithic Period c. 9000-4000 BC

The Mesolithic (*Middle Stone Age*) period currently represents the earliest definitively established period of human occupation across the island of Ireland. A moderate number of ephemeral sites illustrating hunting and gathering subsistence strategies have been identified within the catchment of freshwater sources across the island. Topographical features which are in close proximity to the subject site, such as the River Boyne (600m to the south) and its tributaries, one of which is the nearby River Mattock (2.7km to the southwest), would have provided a rich abundance of natural resources, whilst also serving as potential routeways facilitating access to the island's interior, which at the time was a profoundly dense woodland environment. Furthermore, the waterways would have attracted fish, fowl and predator species which would have been exploited by the early human occupants of this rich landscape. Additionally, the proliferation of naturally occurring flint nodules in the glacial till (Mell Gravels)

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<sup>2</sup> [Meille/Mell | logainm.ie](http://Meille/Mell | logainm.ie)

of the Boyne Valley would also have served the early human population by providing ample quantities of the essential raw material of human life in Irish prehistory, flint. Little surprise therefore that a series of four wooden fish traps were discovered at Clowanstown, County Meath, 20km to the southwest of Newgrange in 2004. Occupation at the lakeside site was radiocarbon dated to 5320–4990 cal. BC and 5000–4720 cal. BC. The site itself comprised a range of wooden features, a consolidated platform and diagnostically late Mesolithic microliths (Mossop 2009) which were reasonably typical examples of the type of sites which date to this period in Ireland, which itself lay only 6km southeast of the nearest bank of the river Boyne.

### 3.2.3 Neolithic period c. 4000-2800 BC

The subsequent radical shift in subsistence strategies from hunting and gathering to farming and fixed settlement during the Neolithic (*New Stone Age*) led to a significant transformation of both the physical and social landscapes across Ireland. This is evident, perhaps nowhere more so than the Boyne Valley, with archaeological evidence on a monumental scale which survives to this day. The landscape of the Boyne Valley has rightly been recognised as a World Heritage site, with the famous monuments at Newgrange (ME019-045), Knowth (ME019-030001) and Dowth (ME020-017) evidencing the significance of the area, but so too the sophistication of the neolithic people and the concentration of their population in this area. 'Brú na Bóinne', or the bend in the Boyne as the World Heritage site is known, is dominated by those three great burial mounds, but they are also surrounded by about forty satellite passage graves, thus this is a funerary landscape on a massive scale which is recognised as having great ritual significance. The concentration and presence of these earlier monuments also attracted the construction of later monuments during the Bronze Age, Iron Age, early Medieval and Medieval periods. One cannot underestimate the archaeological potential of the surrounding lands, during this or any time period, something which was evidenced by the excavation of two early Neolithic houses conducted at Coolfore (00E0794) by O'Drisceoil, in advance of the M1 Northern Motorway, 3km to the northwest of the subject site. Equally the excavation of a circular structure which was uncovered in advance of the construction of the existing M1 Retail Park by Melanie McQuaid (Licence ref. 05E0072) and dated by radiocarbon analysis to the early Neolithic (3820–3690 cal BC) underlines the proliferation of activity during this period in the immediate vicinity of the subject site.

### 3.2.4 Chalcolithic 2800-2500 BC & Bronze Age c. 2500-500 BC

Evidence dating to the Chalcolithic period, when the use of copper first begins to occur, was also excavated by McQuaid and this took the form of structural remains represented by two successive phases of occupation and an inhumation burial. Evidence dating to the subsequent Bronze Age is well represented across the townlands surrounding the subject site with the above trend of funerary monuments existing in close proximity to habitation sites continuing throughout the period; this is exemplified by the site such as the nearby Ring Barrow LH024-046 and the recovery of late Bronze Age pottery by McQuaid (05E0072) on the M1 Retail Park site. The evidence of activity dating to this period, in the immediate area surrounding the subject

site, is further underlined by the excavated *Fulacht Fiadh* (LH024-050), a monument type which traditionally dates to the later Bronze Age (1100-500 BC).

### 3.2.5 Iron Age c.500 BC-500 AD

Although the Iron Age is generally viewed as being more poorly represented by material remains than the preceding periods in Irish Archaeology, one does not need to look too far to find archaeological evidence dating to this period in close proximity to the subject site; McQuaid uncovered the truncated remains of a penannular enclosure sited on the top of the hill on the eastern part of the existing M1 Retail Park site. That enclosure was 12m in diameter with an enclosing ditch that was 28m in circumference and 1.2m in width. Associated internal structural remains were also uncovered and dates of 770–400 and 520–360 BC were obtained for the enclosure, which was suggested to be domestic in nature. The continued occupation of the immediate landscape was further underlined by the industrial activity uncovered on the M1 Retail Park site by McQuaid. This involved the production of iron in seven bowl furnaces and the processing of cereal in sixteen corn drying kilns. The bowl furnaces were located in the western part of the site and for the most part arranged in pairs. Late Iron Age dates were obtained for one of the bowl furnaces (170 BC to AD 60 ). The kilns were spread right across the northern part of the site and two of these returned late Iron Age dates (AD 380–550 and AD 340–540). The most commonly identified grain was barley, but wheat and oats were also present, evidencing the depth and polyculture of the agricultural landscape in the vicinity at that time.

## 3.3 Historic period

### 3.3.1 Early Medieval Period c. 500-1100 AD

Although there was an apparent gap in the archaeological record of McQuaid's site between the end of the Iron Age (500 AD) and the start of the Post Medieval period (1700 AD), that absence tells a tale of its own when viewed in the context of the nearby sites; the proximity of the early ecclesiastical centre of Monasterboice and the numerous surrounding Ringforts and enclosures would have possibly served to crystallise the occupation and habitation of the landscape away from the subject site during this period of time. That being said, the early Medieval period (c.500-1100 AD) is well represented in the neighbouring townlands of the proposed site. The typical settlements of this period are evident in the surrounding landscape with arguably the most common/well known, monument type of this period, ringforts (also known as *raths*), which are widely distributed throughout the surrounding landscape. These are interpreted as enclosed farmsteads, and they generally consist of an area of land enclosed by a ditch, with an associated external earthen bank and larger examples may have more than one ditch and multiple banks forming the enclosure. A significant number of ringforts, also termed enclosures, are distributed across the surrounding landscape, the closest of these being LH024-087, which is located 150m to the south of the proposed development. A less numerous domestic site type of the period is represented in greater County Meath by the thirteen crannogs



recorded in the waters of the county's lakes, Moynagh Lough and Lagore being the most significant of these sites.

Another aspect of life in Ireland during this period, the advent of Christianity and the early Christian church, is exemplified 20m southwest of the subject site in the form of the holy well (LH024-010001) and holy/saint's stone (LH024-0100021), known as *cloghpatrick*, both of which are associated with St. Patrick. Folklore records conflict somewhat on these monuments; one strand has it that it was at the site of these monuments that St. Patrick met the townsfolk of Drogheda in 433 AD, performing baptisms at the hoyalwell, before entering the town itself. The other version of the tale states that the townsfolk chased Saint Patrick west down the mud road (Barrack Lane) adjacent to the well, in order to resist conversion to Christianity. To the north of the subject site (5km) the large ecclesiastical foundation at Monasterboice is evidence of the status and depth of the early church during this period in the area. Further evidence of the communal occupation of some parts of the landscape during the early medieval period is also shown by the proliferation of certain placename prefixes in the townland names which typically suggest sites dating to the period; 'Rath' (Hill of Rath), 'Lis' (Liscorrie) 'Tiarmonn' (Termonfeckin) to name but a few.

### 3.3.2 Medieval Period c. 1100-1600 AD

The Medieval period brought with it further change to settlement patterns and use of the countryside; firstly, thanks to the reorganization of Irish monasticism that occurred subsequent to the changes to the diocesan system at the Synod of Rathbreasail in 1111 AD and secondly due to the arrival of the Anglo-Normans to these shores in 1169 AD. In terms of the former, the introduction of the large-scale monastic orders from continental Europe begins with the foundation of a Benedictine Abbey in Erenagh, in the diocese of Down in 1127 AD. The closest of these later monastic foundations was Mellifont Abbey, which was founded in 1142 AD by St. Malachy of Armagh (Gwynn and Hadcock 1970) as the motherhouse of the Cistercian Order, located 3.5km to the northwest of the subject site. The success and the size of the foundation was underlined when the order sent out seven colonies between 1147-1152 AD to establish new abbeys. Mellifont Abbey (LH023-007002), from the Latin *Melli-fons*, meaning 'Font of Honey', is a National Monument, which was excavated in 1954-5 (de Paor 1969) and conserved by the Office of Public Works. Continental influence can be seen in the architecture of the building which was constructed in 1157 AD and completed c. 1225 AD. The abbey was burnt in the first quarter of the fourteenth century and parts of the nave were rebuilt later in that century. Comparatively little of the abbey remains standing and the most interesting building is probably the lavabo which was erected c. 1200. There is a vaulted chapter house to the east of the cloister, the latter now represented only by a small run of reconstructed arcading to the south. Little remains of the church itself other than the pillar bases and some wall foundations. The architecture of the abbey is fully described and discussed by Stalley (1980), as are the history and the results of the archaeological excavations which took place there under the direction of de Paor. In 1494 AD the Abbey was apparently plundered by the local nobles and

following the 1539 AD suppression of the monasteries in 1556 AD it was converted into a residence, which saw the signing of the Treaty of Mellifont in 1603 AD, with the Abbey later serving as William of Orange's headquarters in 1690 AD during the Battle of the Boyne.

Although folklore links *Amergin Glúingel*, a bard, druid and judge for the Milesians to Drogheda (the Gaelic *Droichead Átha* meaning the bridge at the ford) the town is now generally thought to have been founded as part of the Anglo-Norman invasion of Ireland which commenced 1169 AD (Bradley 1978), with evidence from multiple archaeological excavations carried out in the town appearing to confirm this. One of the earliest confirmed structures in the town was the motte-and-bailey, an early type of earth and timber-built castle, on the site of what is now known as Millmount Fort, overlooking the town from a bluff on the south bank of the River Boyne and this was probably erected by the Anglo-Norman Lord of Meath, Hugh de Lacy, sometime before 1186 AD. The earliest known town charter is that granted to 'Drogheda-in-Meath' by Hugh's son, Walter de Lacy in 1194 AD. Drogheda was an important walled town of the Pale during the medieval period and it frequently hosted meetings of the Irish Parliament, however in 1495 AD the parliament passed *Poyning's Law*, arguably the most significant piece of legislation in Irish history, a law which effectively subordinated the Irish Parliament's legislative powers to the King and his English Council.

### 3.3.3 Post-Medieval Period c. AD1600-present

Drogheda was besieged twice during the Irish Confederate Wars and during the second siege, an assault was made on the town from the south. The tall walls were finally breached, and the town was taken by Oliver Cromwell on 11<sup>th</sup> September 1649, as part of the Cromwellian conquest of Ireland and it was the site of a massacre of the Royalist defenders. Cromwell wrote after the siege of Drogheda, "*When they submitted, their officers were knocked on the head, and every tenth man of the soldiers killed and the rest shipped to Barbados*"<sup>3</sup> The town is marked as 'Drogheda City' by the Down Survey Maps of 1658 (not shown here); walls, houses and a bridge over the river all clearly marked, with the 'Droheda Liberties' marked on the Meath map to the south of the town, and the 'Droghada Liberties' marked in County Louth to the north of the town, external to the walls. The lands which the subject site occupies are illustrated within the 'Lordship of Melliphont' but no features are otherwise detailed within or near the subject site.

Drogheda was one of ten boroughs retained under the Municipal Corporations (Ireland) Act 1840 and under the Local Government (Ireland) Act 1898 the area became an urban district. The growth of the town during the post-medieval period is evidenced by the various cartographic sources and obviously it was greatly assisted by various industries, the port and the rail links to Dublin in 1844, Navan in 1850 and Belfast in 1852. However, the lands of the subject site would appear to have remained in agricultural in use, for the main, with their pastoral nature being underlined by the first edition Ordnance Survey mapping of 1836 (Figure

<sup>3</sup> [https://en.wikisource.org/wiki/Cromwell\\_letter\\_to\\_William\\_Lenthall](https://en.wikisource.org/wiki/Cromwell_letter_to_William_Lenthall)

5) and the subsequent 25-inch mapping of 1910 (Figure 6). One notable feature exists on the subject site during this period in the form of the 'Police Station' which is illustrated in 1836 on the same site as the 'Courthouse' which was illustrated by the later 25-inch mapping and these were located in the southeast corner of the subject site, on the crossroads.

According to Garry(1990) Barrack Lane derives its name from the old police or Constabulary barracks, which was situated at the end of Barrack Lane (Figure 5), near St. Patrick's Stone. The barracks was described as being a five bay, two storey, yellow-washed building, with gable end to the road. The building was listed by Griffith in his valuation of 1854, where the landlord was one Francis William Leland, and a small detachment of RIC Constables was stationed here up until just before World War I. Although it remained vacant for some time after that it was in use as a presbytery for the Mell curates in the 1930's, prior to its eventual demolition in 1972. Thus, no trace of this feature remained above ground at the time of the site visit. The Courthouse is described by Garry(1990) as also being known as a sessions-house, with Mell being a Petty Session's district, and Mr. John Stanley being recorded as the clerk. John Healy's public house is also recorded in this corner of the site and in 1886 the structure is also recorded as the polling station for Mell. The National Archive's online database list Petty Sessions records/Court Order books for the Mell Courthouse between July 1860 and December 1922, evidencing the timespan of the court's operation.

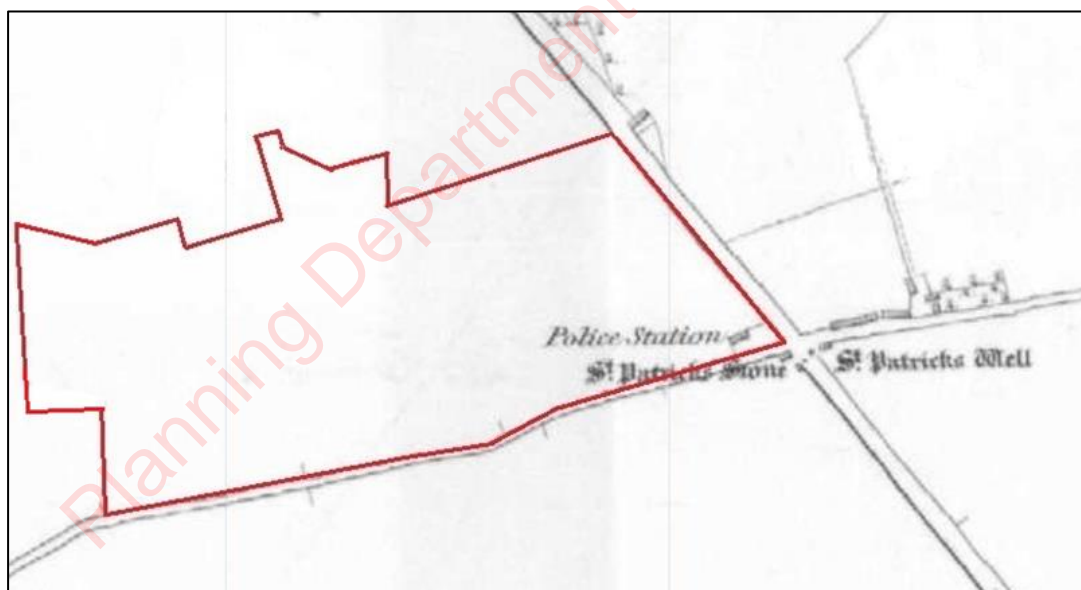


Figure 5 ` 1<sup>st</sup>-edition OS map 1836, with site outline in red (OSI)

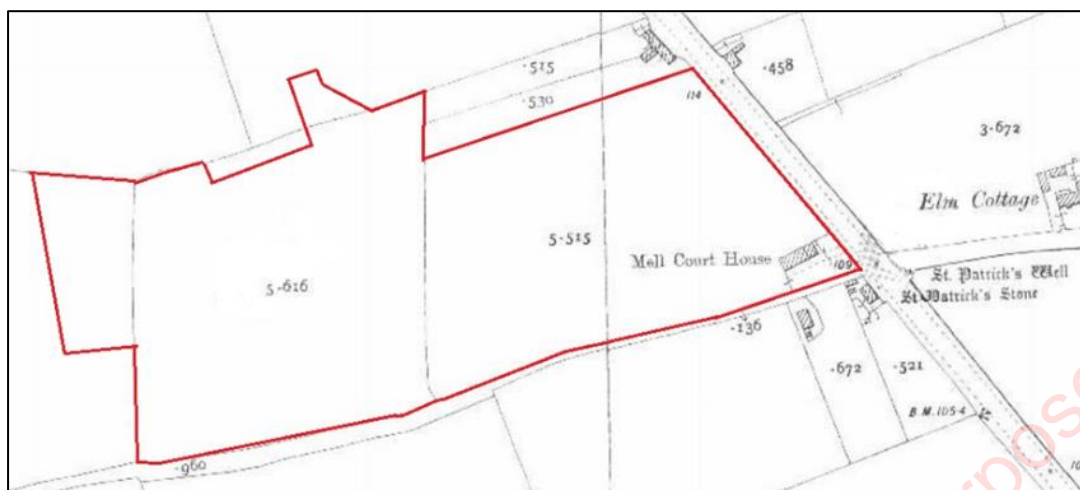


Figure 6 Ordnance survey 25-inch map of the site 1910, proposed site outline in red (OSI)

## 2.4 Record of Monuments and Places (RMP) sites

The archaeological constraint maps in conjunction with the Record of Monuments and Places, provide an initial database for planning authorities, state agencies and other bodies involved in environmental change.

The Record of Monuments and Places comprises the following elements: (i) Letter or Letters indicating County (LH=Louth); (ii) A three-digit number indicating the relevant Ordnance Survey Sheet Number (e.g. 004); (iii) A three, four or five-digit number indicating the dedicated number of the individual site or monument.

There is a total of twenty-three recorded sites and monuments within 1.5km of the proposed development, .

RMP No	Classification	Townland	Description
LH024-043001	Souterrain	Mell	An L- shaped souterrain with a collapsed beehive chamber at one end . The walls were of drystone construction. The total length of the souterrain was 36.88m and its roof (of lintels) was intact for almost one third of this. The average width of the passage was 0.72m and its height was 1.1m. At about mid-length there was a step c. 0.45m n height. A number of sherds of Carrowkeel ware pottery were recovered from the souterrain together with a bronze mount decorated with openwork interlace. Six sections of earthworks (LH024-043002-) were excavated in the vicinity.

LH024-043001	Earthworks	Mell	Sections of six separate linear ditches were exposed and excavated. 'Ditch A' was located 27m SE of a souterrain (LH024-043001-), it was V-shaped (Wth 2-3.5m; D 1.56m) and a 24m length running in a E-W direction was excavated to facilitate the road development. The only find was a piece of iron slag. 'Ditch B' was located just over 40m S of 'Ditch A'. The excavated L was 29m (Wth 1.7-2.8m; D 1.18m). Finds recovered included animal bones, a lignite spindle whorl, part of a lignite bracelet and a blue glass bead. 'Ditch C' was V-shaped (max. Wth 1.6m; D 0.7- 2m) and appeared to be cut by the souterrain. A sherd of pottery and some possible cremated bone were recovered from the fill. 'Ditch D' was located 20m S of the souterrain, it was V-shaped (Wth c. 1.5m; D 0.6m) and its surviving L was 13.11m. A number of flint flakes and some possible sherds of Neolithic pottery were recovered from the area around this ditch. (Breen 2002, 236-7). 'Feature F' (Wth 2-3.5m) was located 27m SW of the souterrain and the only find from it was a piece of iron slag. 'Feature G' (Wth 1.7-2.8m; D 1.18m), was located 41m south of the souterrain and finds 'included a flint blade, cores and débitage, prehistoric pottery, a cylindrical wooden object, and two items of lignite or similar material: a spindle-whorl and a fragment of a bracelet'.
LH024-045	Prehistoric activity	Tullyallen	A complex of ditches, pits and spreads were excavated but the exact function of these features was uncertain. Flints, slag and burnt bone were recovered in association with the features.
LH024-046	Barrow- Ring barrow	Tullyallen	A multi-phase ring barrow (external diam. c. 13.2m), with a centrally placed cremation contained within a pottery vessel, was uncovered here in 2000 prior to construction of the M1 Motorway (Excavation Licence No. 00E0429). The ditch (max. D c. 1m; Wth 1.9m) displayed three distinct phases of activity and at least six token cremations were discovered in the SE quadrant of the final phase.
LH024-048	<i>Fulachta Fiadh</i>	Mell	A spread of burnt material (13m x 8.8m) was initially exposed. Removal of this uncovered four pits, the largest of which may have functioned as a trough (2.6m x 1.8m; D 0.6m). A large amount of flint was recovered from the site.

LH024-049	<i>Fulachta Fiadh</i>	Mell	A spread of burnt material (10.5m x 8m) was initially exposed. Removal of this uncovered four pits cut into the natural subsoil. The widest and shallowest pit (3m x 1.6m; D 0.16m) contained a flint scraper and five waste flakes.
LH024-050	<i>Fulachta fiadh</i>	Mell	A small spread of burnt material (10.8m x 3.2m) was initially exposed (this was not the full extent of the spread but all that was exposed to facilitate the development). Removal of the spread uncovered three pits cut into the natural subsoil. One was sub-rectangular (1.5m x 1.2m; D 0.8m), the second was sub-circular (diam. 1.5m; D 0.41m) and the third was irregularly shaped and lined with charcoal, however its full extent was not established as it extended beyond the road take.
LH024-051	Prehistoric activity	Tullyallen	A curvilinear ditch (max. Wth at the top of excavated section 2.9m; max. D 1.68m) which contained a flint scraper, two waste flint flakes, an inscribed stone disc and a small quantity of burnt bone. A small linear trench (L 3.1m; Wth 0.16m; max. D 0.25m) was located 5m N of this ditch and contained six struck flint flakes.
LH024-052	Prehistoric activity	Mell	A sub-circular pit (0.83m x 0.58m, D 0.14m) which contained sherds of coarse pottery, heat fractured stones and a possible granite maul.
LH024-055	Cremation pit	Mell	Discovered prior to construction of the M1 motorway in 2000 (Excavation Licence 00E0430). A triangular pit (1m x 0.75m) filled with ash, charcoal, burnt clay and fragments of cremated bone. Postholes found around this pit were filled with the same material as the main pit. Situated immediately to the E of cemetery (LH024-054----) and just S of a ring ditch (LH024-062----) and Bronze Age enclosure (LH024-063----) and possibly associated with the latter two.
LH024-087	Ringfort-rath	Mell	Located towards the top of a S-facing slope. An arc (int. diam. c. 20m E-W; ext.diam. c. 25m) of two fosses curving SW-N-ENE is visible only on Apple Maps, which utilises a survey conducted by Bluesky International during June 2018. It was first reported by Anthony Murphy.

LH024-089	Ringfort-rath	Mell	Located at the tip of a small, low W-E spur. It overlooks a curve to the E of a small N-S stream that is c. 170-200m distant. The cropmark of a circular enclosure (diam. c. 30m) defined by a single fosse is visible only on Google Earth (21/07/2021). This is within an outer oval enclosure (dims c. 60m NE-SW; c. 50m NW-SE) defined by single fosse, but the perimeters of both appear to coincide NW-N.
LH024-010001	Ritual site-Holywell	Mell	Marked 'St. Patrick's Well' on the 1835 and the 1938 'OS 6-inch' maps. Covered over with a public pump when inspected by ASI in 1966.
LH024-010002	Ritual site-Holy/Saint's stone	Mell	Marked 'St. Patrick's Stone' on the 1835 and 1938 'OS 6-inch' maps. A large natural boulder with three circular depressions, which, according to tradition are the prints of St. Patrick's knees and staff (Davies 1944, 296; IFC Schools' Mss 679, 181).
LH024-012001	Souterrain	Mell	The site consisted of two sections of souterrain and a cemetery site (LH024-012003-) within an enclosure (LH024-012004-) discovered during pipe-laying. The two sections of souterrain were situated 8-10m apart. The E section of the souterrain consisted of a drystone-built passage (L 2m). The W section consisted of part of a de-lintelled circular chamber.
LH024-012003	Burial Ground	Mell	Associated with the remains of souterrain (s) (LH024-012001- and LH024-012002-), discovered in 1983 during the course of cutting a trench for sewerage. The site was recorded by Mr C. Manning (OPW) who supervised the digging of trial trenches in 1985 and discovered a small enclosure (LH024-012004-). It was c. 50m in diameter enclosed by a ditch (Wth 2.5m, D 1.8m). The burials were very scattered but were seen to be orientated E-W and were not slab-lined. The souterrain and the burials were enclosed by the ditch.
LH024-012005	Ritual site-Holywell	Mell	Marked on the 1835 'OS 6-inch' map as 'Toberboice Well'. There is a tradition that St. Boice drank from this spring before he was beheaded (IFC Schools' Mss 679, 179). It was covered in concrete when inspected by ASI in 1967.

LH024-091	Ring-ditch	Moneymore	Located at the bottom of a slight N-facing slope and at the S edge of a small basin (diam. c. 300m N-S; c. 300m E-W). An oval enclosure (dims c. 20m E-W; c. 15m N-S) defined by a single fosse feature is recorded in a gradiometer survey (18R0118) of a development area. It has a wide entrance at E and it may have numerous pits in the interior. It is situated beneath a N-S access route that is depicted on the 1835 edition of the OS 6-inch map.
ME020-025009-	Ford	Oldbridge	Site of a ford
ME020-035	Excavation	Oldbridge	Struck flint and pit
ME020-039	Ford	Oldbridge	Site of ford.
ME020-072	Enclosure	Oldbridge	Identified through Lidar imagery
ME020-088	Enclosure	Oldbridge	Located at the bottom of a N-facing slope down to a W-E section of the River Boyne, with the river c. 100m to the N, and just E of the M1 motorway. Archaeological testing (08E0506) identified a large enclosure (int. diam. c. 70m) defined by a ditch which produced a wealth of Middle Bronze Age pottery.

Table 1 List of RMP's within 1.5 kilometres of proposed site (archaeology.ie)





Figure 7 RMP sites within 1.5km of proposed development site (yellow dot) (ASI)

### 3.5 Archaeological excavations

A search of the online database, [www.excavations.ie](http://www.excavations.ie), which is the online repository of summaries of all excavation licences issued (1970-2018), records that a total of twenty-one archaeological excavations/investigations have been carried out within 1.5km of the subject site. These include a number of excavations undertaken out during development of the M1 motorway which is located to the west of the proposed development.

Licence No.	Location	Site Type	Author
04E1687	Immediately north of subject site, Mell Townland	Monitoring uncovered the multiphase prehistoric site, excavated under 05E0072	M.McQuaid
05E0072	Immediately north of subject site, Mell Townland	Multiphase prehistoric complex	M.McQuaid

98E0285	1km southeast of subject site, Loughboy Townland	Medieval monastic	S. Cross
00E02429	1.2km northwest of subject site, Tullyallen Townland	Ring Barrow	R. Chapple
00E0631	1.2km northwest of subject site, Mell Townland	Early medieval souterrain and associated features	T. Breen
00E0738 (and ext.)	400m south of subject site, Mell Townland	Non-Archaeological	D. Murphy
00E0832	600m of the subject site, Oldbridge Townland	Prehistoric activity	C.Duffy
00E0860	600m of the subject site, Oldbridge Townland	Battlefield	E. Byrnes
00E0938	1.2km southwest of subject site, Oldbridge Townland	Prehistoric activity	K.Campbell
00E0939	1.2km southwest of subject site, Oldbridge Townland	Undated deposits	K.Campbell
00E0940	1.3km northwest of subject site, Mell Townland	Prehistoric activity	K.Campbell
None issued	950m west of subject site, Tullyallen Townland	Non-archaeological	K.Campbell
00E0947	1km northwest of subject site, Tullyallen Townland	Ringditch	K.Campbell
00E0430 (and ext.)	750m northwest of subject site, Mell Townland	Early medieval enclosure, cemetery and prehistoric activity	T. Breen

01E0067	1.3km northwest of subject site, Mell Townland	<i>Fulacht Fiadh</i>	K.Campbell
04E0507 (and ext.)	1.3km south of subject site, Rathmullan Townland	Enclosure	D. Bayley
08E0506	1.3km south of subject site, Oldbridge Townland	Bronze age occupation	R. O'Maolduin
13E0400	900m south of subject site, Oldbridge Townland	Non-Archaeological	F. Bailey

Table 2 Excavation results from within 1.5km of the subject site (www.excavations.ie)

### 3.6 Topographical Files

The National Museum of Ireland is the repository for the archive records of all known antiquities recorded by that institution, the files relate primarily to artefacts but also contain references to monuments and in some cases previous archaeological excavations. There is no information recorded by the Topographical files on or in close proximity to the subject site or in Mell townland and closest recorded file is for the 3 no. Cordoned Urns, 1 no. Encrusted Urn, bone pin, bronze razor, a flint flake and a polished whetstone, which were uncovered 1.4km to the northeast of the proposed development at the Hill of Rath.

### 3.7 Aerial Photography

The available aerial photographs of the site of the proposed development evidence the build-up and deposition of construction debris from the adjacent M1 Retail Park as occurring from 2005 onwards (pre-deposition Figure 8). Thus, the current overgrown current landscape of the subject site is not an accurate representation of the original ground levels, which have been masked by the mass deposition of materials (post-deposition-Figure 9).



Figure 8 Aerial view of proposed site outline in red c.2005, pre-deposition of materials (OSI)



Figure 9 Aerial view of proposed site outline in red c.2010, post-deposition of materials (OSI)

## 4 Field inspection and discussion

The proposed site is located on the south facing, upper slopes of the Boyne River valley, 600m north of the river itself. The land that the proposed development occupies is overgrown with grass and small shrubs, whilst the natural contours of the hill, and therefore the original ground level, have been heavily obscured by up to 3-4m of mixed deposited materials, which accumulated directly from the post c.2005 development of the M1 Retail Park to the north. The proposed development site was visited twice by the author, Wednesday 8<sup>th</sup> February 2023 and again on 7<sup>th</sup> March 2023. Topographically the land which the proposed site is located on is visibly in stark contrast to the remaining natural, unaltered topography of the area. The extent of this alteration is apparent from a comparison of the 2005 satellite imagery of the site (Figure 8), which shows the site in its former unaltered state, with the subsequent satellite image (Figure 9) from c.2010 which shows the extent of the built-up materials on the subject site, shortly after the completion of the existing M1 Retail Park. Dumper routes and tip heads can be discerned atop the dumped materials, which would appear to extend throughout the majority of the proposed site.

The subject site is located to the immediate south of the existing M1 Retail Park lands and a premises belonging to TrinityStone.ie, in what is a late 19<sup>th</sup>-century domestic dwelling with associated garden/yard area. To the east the subject site is bounded by the R168 (Trinity Street) road and a mixed of Heras fencing and green metal mesh fence panels, with a gateway fenced in the latter present at a former access road to the proposed site's interior (Plate 1). Barrack Lane (Plate 2 & 3) runs along the entire southern perimeter of the subject site and it would appear that this laneway was formed by cutting into the natural hillslope, as a drop of >0.6m is evident from the lands of the subject site to the laneway surface. A stone wall, with differing ages of mortar and in varying states of repair, runs along much to the northern side of Barrack Lane and this supports limited modern fencing in some areas and mature hedgerows towards its western end. The western perimeter of the site is bounded by an incomplete mature hedgerow in the southwest corner, whose northern limits were removed post c.2005, allowing access to the northwest corner of the subject site, which has no barrier to the lands beyond (currently), lands which yet retain their original topographical situation.

The site therefore is much as it appears in the later aerial photography (Figure 9), except for a covering of grass, infrequent small shrubs and young trees, which have grown in the intervening period since c.2010. The area at the northern end of the subject site is a heavily compacted, near barren, flat surface (Plate 6), with grass covered, flat, tip routes leading southeast, south and southwest (Plate 5), downslope from this man-made plateau. The tip trails end at their respective tip edges, with their steep grass covered slopes eventually leading to the remaining areas of possible original topography, which are confined to a thin strip adjacent to the southern boundary of the proposed development site (Plate 4).

There was no discernible trace of any sperate plot of land in the southeast corner of the proposed site area at the location of the former barracks (Figure 5)/courthouse (Figure 6) illustrated on the historical mapping, nor indeed was there any obvious remains of those structures, which according to Garry (1990) were demolished in 1972.

During the site inspections the author examined the site for the feasibility of geophysical survey and archaeological test trenching. Topographically the land which the proposed site is located on is in stark contrast to the remaining natural, unaltered topography of the lands to the south and west of the proposed site area. Having inspected the site and consulted with geophysical survey specialists it is the opinion of the author that this type of survey is not feasible or prudent as part of any condition which might be associated with any grant of planning for the proposed development. However, should a positive grant of planning be made, it would be prudent to conduct some limited archaeological test trenching close to the southern boundary of the proposed development (Plate 4), as the estimated infilling depth there is 0.2-0.6m above the former ground level, and a recommendation to that end is made below.

## 5 Impact assessment, mitigation and conclusion

5.1 This archaeological impact assessment has been prepared to outline and assess the possible risk to any archaeological sites, features, deposits or finds which might exist in the receiving environment of the proposed development of the site adjacent to the existing M1 Retail Park, at Mell, Drogheda, County Louth (Figure 1 & 2).

### 5.2 *Impact assessment*

The landscape and visual assessment of the proposed development site, Chapter 10 of the EIAR (Enviroguide 2022) submitted with the planning application for the site details that the proposed design for the site was influenced by a considerable difference in levels across the site: 33.5m OD at the northern end of the site, with 26.5m OD-28.5m OD along Barrack Lane, at the southern end of the site. As such the proposed development will involve a mass bulk excavation of the accumulated deposits from the northern extent of the proposed site, which could have a direct negative impact on any currently preserved archaeological horizons in that part of the proposed site. Where the extent of the built-up materials is less, predominantly along the southern edge of the site, the differing levels planned (Figures 10-14) mean that any excavation would be lessened or indeed a building up of the existing site levels may occur in this area. However, the proposed landscaping, paths and any services (drainage etc.) could still have a direct, negative impact on any currently preserved archaeological horizons present in the southern part of the proposed site (Figures 10-14).

This assessment has not uncovered any definitive evidence for the presence of any archaeological remains, features or finds on the subject site, although the likelihood of their presence is suggested to be high. As noted above there are additional complications in the form of the mass deposits of previously imported topsoil/subsoil and builders' rubble which occupy the majority of the subject site. Those deposits negate the use of geophysical survey as a means of ascertaining the presence of archaeology on the subject site. Additionally, those same mass deposits severely impair the ability to archaeologically test trench the subject site.

Thus, the impact that the proposed development might have on the archaeological resource cannot be accurately gauged at this point in time. The subject site exists in possibly the richest archaeological landscape on the island, with the World Heritage site & respective buffer zone in close proximity, in addition to the neighbouring excavated multiperiod site (McQuaid 2005) and the multiple adjacent & nearby RMPs, all of which point to the continuous human occupation of the immediate landscape, as reinforced by multiple other nearby excavations, since at least the early Neolithic period.

The visual impact of the proposed development on the World Heritage sites and landscape was also assessed by the author and by Jim Manning of Digital Dimensions Ltd (Manning 2023). The three monuments at the core of the World Heritage site will suffer no direct or indirect visual impact, should the proposed development be granted planning permission. Furthermore, none of the protected views listed by the Meath County Council Development Plan (2021-2027) and

depicted by map 8.6.1<sup>4</sup> of that development plan will be affected should the proposed development be permitted.

### 5.3 Mitigation

Due to the build-up of materials and overburden on the site relating to the construction of the existing M1 Retail Park to the north only an estimated <10% of the proposed development site may yet retain its unaltered pre-2005 topsoil-subsoil profile.

It is the opinion of the author that the proposed development should be permitted to proceed, with a case relevant and prudent archaeological condition attached to the successful grant of planning permission. In the event of permission being granted the impact of the proposed development and its associated works on the archaeological potential of the site needs to be more definitively assessed and this will require licenced archaeological monitoring from the outset in order to inform a fuller mitigation of any impact. Therefore, in response to the request for further information, the following comprehensive archaeological condition is suggested as an attachment to any successful grant of planning permission :

- a) All advance works and enabling works associated with the proposed development (geotechnical investigations, groundbreaking, levelling of ground etc.) which might impact the archaeological resource should be archaeologically monitored by a suitably qualified archaeologist, under licence and in accordance with the provisions of the National Monuments Acts 1930-2004. If significant material is identified during the archaeological monitoring, then the archaeologist will have the power to halt works on site and consultation will occur with the National Monuments Service regarding the significance of that material, prior to any case appropriate mitigation measures being agreed.
- b) A targeted program of archaeological test trenching should be carried out on the southern parts of the site adjacent to Barrack Lane, which have suffered the least deposition, by a suitably qualified archaeologist under licence and in accordance with the provisions of the National Monuments Acts 1930-2004.
- c) A report containing the results of that program of test trenching should be submitted to the National Monuments Service (DoHLGaH) for consultation in advance of construction.
- d) If archaeological material is shown to be present then every reasonable effort should be made to preserve that material *in situ* or reduce the impact on that archaeological material. Where preservation *in situ* is not possible, either in whole or in part, then preservation by record should be achieved by the licenced archaeological excavation of any archaeology which would be impacted, prior to construction. Those works should

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<sup>4</sup> [Layout: Bru Na Boinne Insert Map 8.6.1 \(meath.ie\)](#)



be undertaken by a suitably qualified archaeologist under licence and in accordance with the provisions of the National Monuments Acts 1930-2004.

5.4 *Conclusion*

This archaeological impact assessment has not identified any issue which might prevent a successful grant of planning for the proposed development, it is the opinion of the author that an appropriately conditioned grant of planning permission should be made in this instance.



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## 5 References

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Excavations Database accessed 08/03/23, [www.excavations.ie](http://www.excavations.ie)

## Plates



Plate 1 Former access road into proposed site's interior from R168, facing west



Plate 2 Entrance to Barrack Lane from R168, facing west



Plate 3 Barrack Lane, facing east along the proposed site boundary



Plate 4 Southern extent of proposed site showing suggested area for archaeological testing, facing west



Plate 5 Northwestern edge of dumped materials on proposed site, facing southwest



Plate 6 Flat area of dumped materials at northern edge of proposed site, facing west

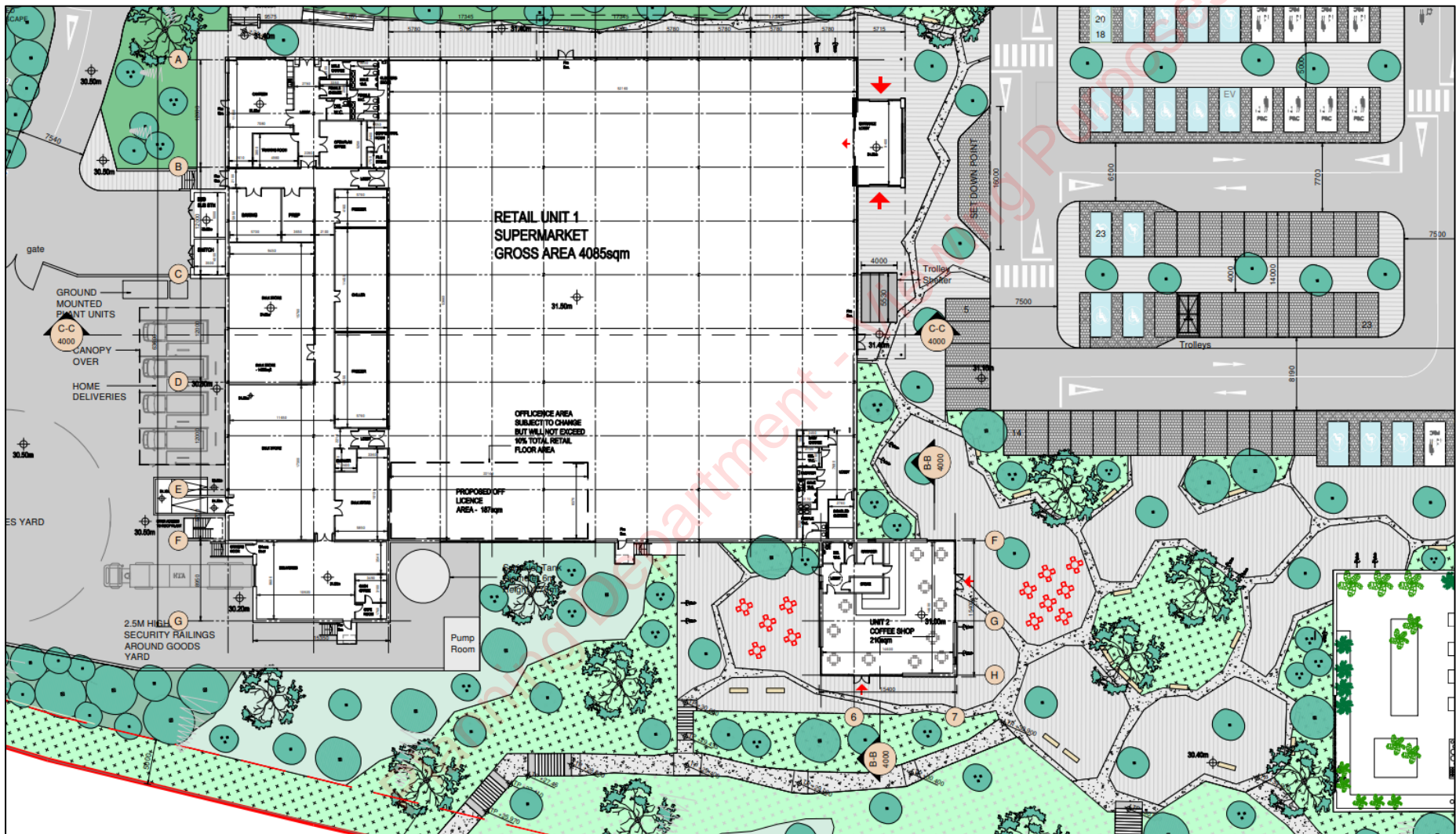


Figure 10 Ground floor plan of proposed development Units 1 & Unit 2 with section locations (MCA Architects)

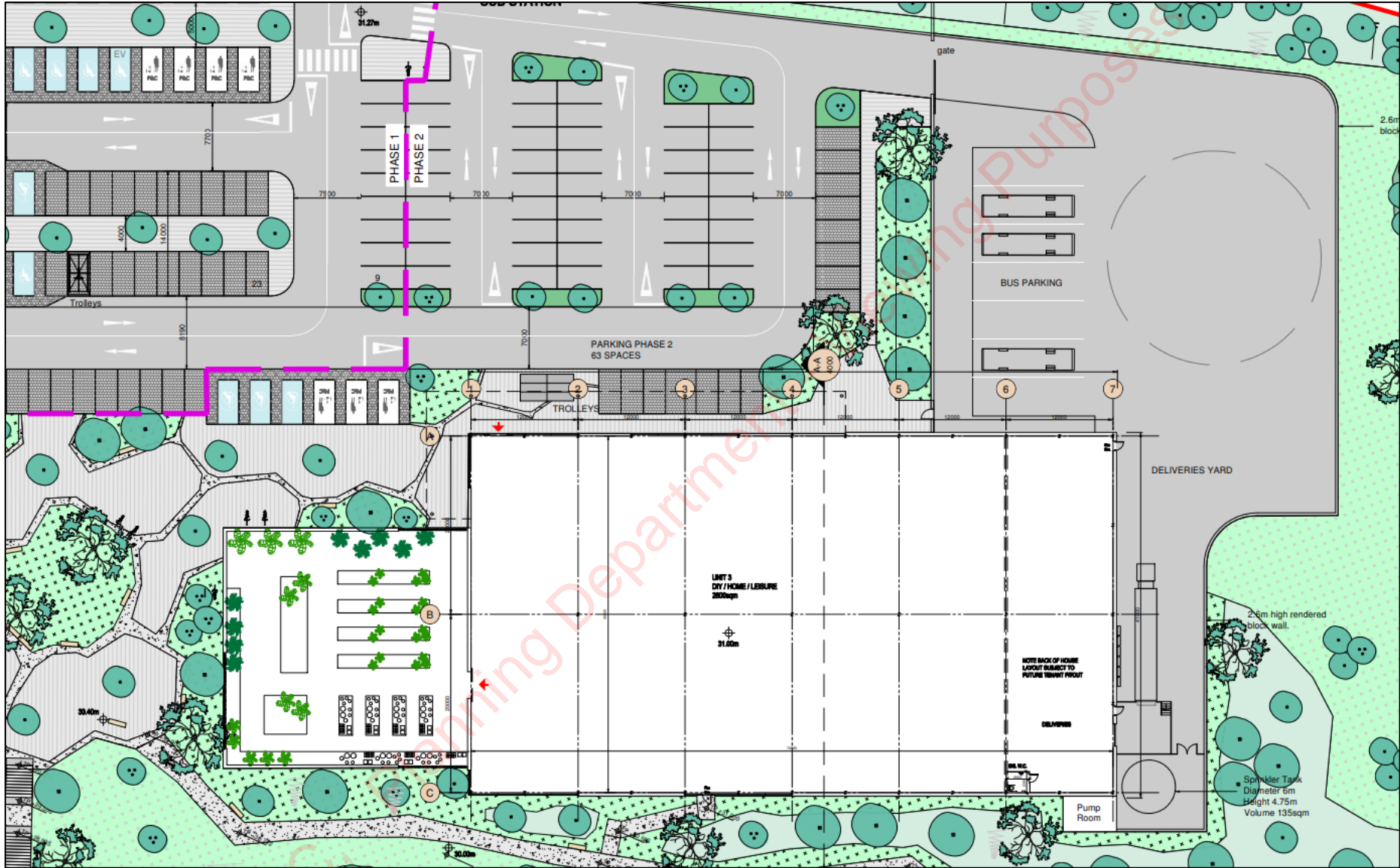


Figure 11 Ground floor plan of proposed development Unit 3 with section location (MCA Architects)

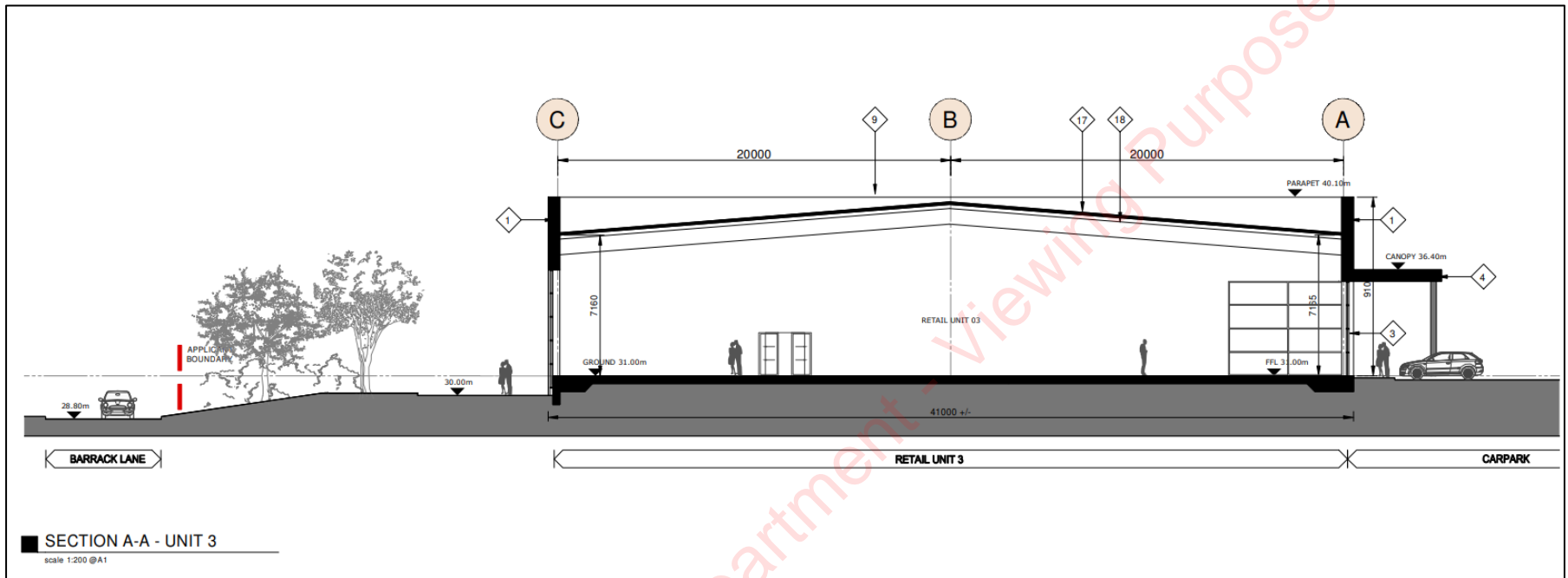


Figure 12 Section A-A Unit 3 (MCA Architects)



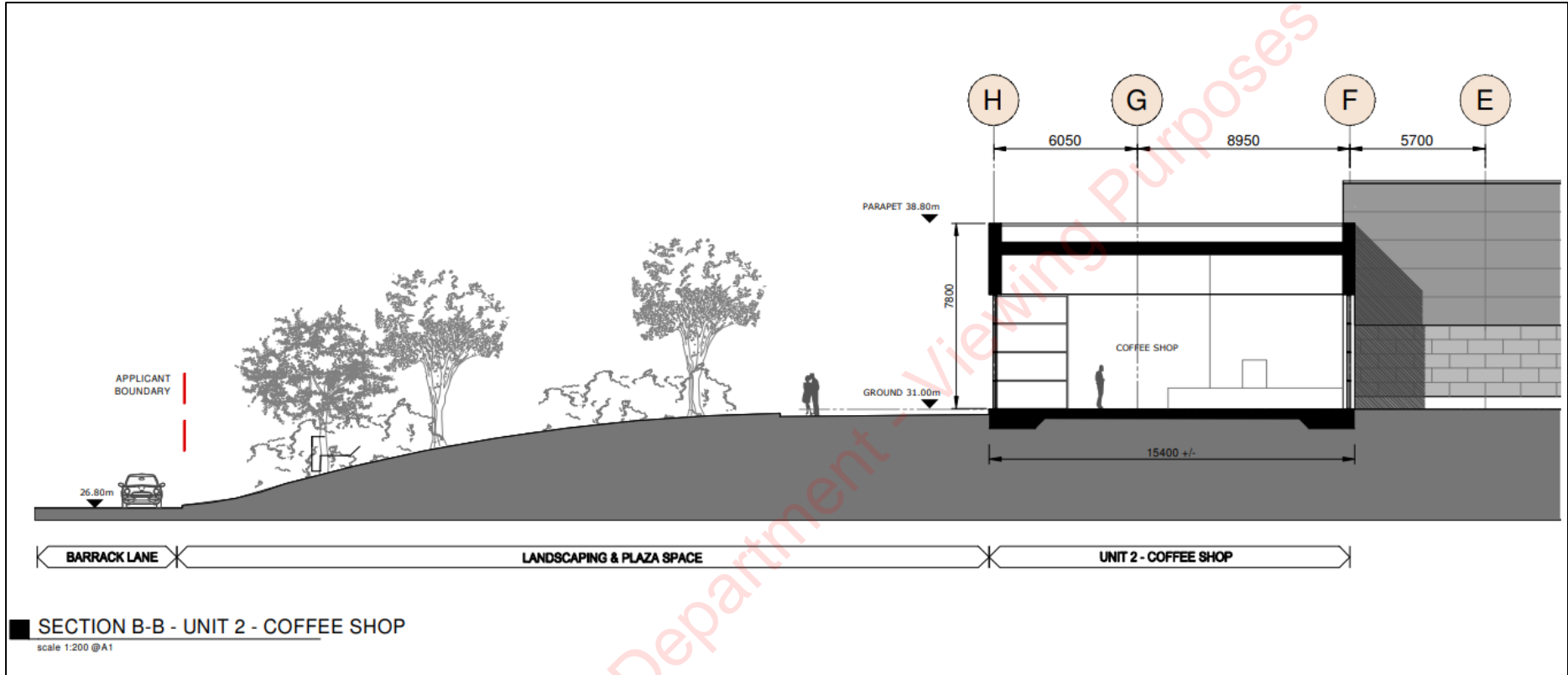


Figure 13 Section B-B Unit 2 (MCA Architects)

Louth CC, Planning Department - Viewing Purposes Only!

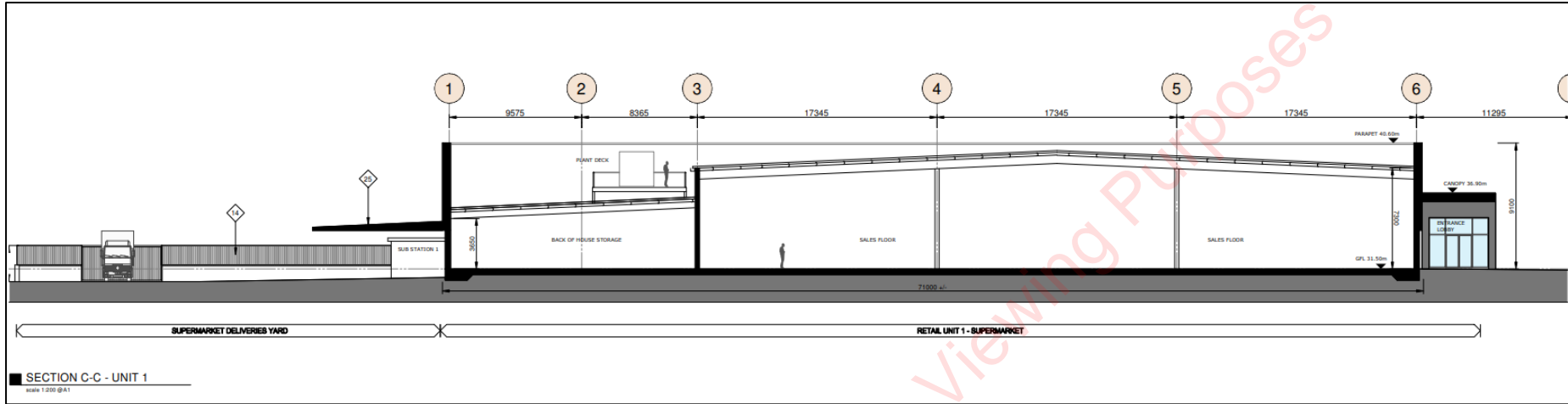


Figure 14 Section C-C Unit 1 (MCA Architects)

Louth CC, Planning Department - Viewing Purposes Only!