

Rock of Dunamase Car Park, Co. Laois

Landscape Design Statement

prepared for:

Laois County Council Aras an Chontae Portlaoise Co Laois

March 2023

www.jbaconsulting.ie



JBA Project Manager

Michael O'Donoghue 24 Grove Island Corbally LIMERICK V94 312N Ireland

Revision History

Revision Ref/Date	Amendments	Issued to
S3-P01 - 16/03/2023	Draft Landscape Design Statement	Laois County Council

Contract

This report describes work commissioned by Shared Access Limited, by an email dated 9th January 2023. Maria Inês Timóteo and Christos Papachristou of JBA Consulting carried out this work.

Purpose

This document has been prepared as a Draft Report for Shared Access. JBA Consulting accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

JBA Consulting has no liability regarding the use of this report except to Shared Access.

JBA Consulting has no liability regarding inaccuracies in the work produced by other consultants.

Copyright

© JBA Consulting Engineers and Scientists Limited 2023.

Carbon Footprint

A printed copy of the main text in this document will result in a carbon footprint of 107g if 100% post-consumer recycled paper is used and 136g if primary-source paper is used. These figures assume the report is printed in black and white on A4 paper and in duplex.

JBA is aiming to reduce its per capita carbon emissions.



Contents

1	Introduction	5
1.1	Background	5
2	Landscape Context and Character	5
3	Proposed Development	8
3.1	Description of the Development	8
3.2	Design Approach	9
3.3	Planting and Maintenance	14
4	Conclusion	14



List of Figures

Figure 2.1 Site Location	5
Figure 2.2 View towards the west, from the existing site access gate along the easte boundary.	ern 6
Figure 2.3 View towards the west, showing existing woodland surrounding the Rock	of
Dunamase outcrop.	7
Figure 2.4 View towards the south, showing existing trees and hedge along field bou	ındary.7
Figure 3.1 Proposed Landscape Masterplan (Refer to Drawing no. ISG-JBAI-XX-XX-D	R-L-
0001)	8
Figure 3.2 Precedent image of a car park with permeable grass paving	9
Figure 3.3 Proposed Ornamental Shrub Planting	10
Figure 3.4 Example of swale planting within a grassland landscape setting	10
Figure 3.5 Proposed Groundcover Planting	11
Figure 3.6 Example of a picnic area enclosed by mature woodland	12
Figure 3.7 Example of a picnic area with open views in one direction	12
Figure 3.8 Proposed Trees	13



1 Introduction

1.1 Background

JBA Consulting Ireland Ltd. has been commissioned by Laois County Council as Landscape Architect for the proposed car park and associated amenities at the Rock of Dunamase, Co. Laois. This report has been prepared to address the landscape design intent and to explain the rationale behind the landscape proposals.

This report should be read in conjunction with the drawings and planting schedule listed below. For details of the car park, drainage and attenuation, please refer to the Engineer's drawings and reports.

ISG-JBAI-XX-XX-DR-L-0001 - Landscape Masterplan A1 scale 1/500
 ISG-JBAI-XX-XX-DR-L-0002 - Car Park Landscape Plan A1 scale 1/250
 ISG-JBAI-XX-XX-DR-L-0003 - Picnic Area Landscape Plan A1 scale 1/250
 ISG-JBAI-XX-XX-DR-L-0004 - Planting Schedule A1 N/A
 ISG-JBAI-XX-XX-DR-L-0005 - Soft Landscape Plan A1 scale 1/250

2 Landscape Context and Character

The proposed development site is located in a field north of the Rock of Dunamase, Co. Laois (Figure 2.1). The proposed site and the existing monument are accessed by local road L7830 to the north, and local road L6831 from the southeast. M7 is located approximately 2.6km to the west and national road N80 is c. 600 metres to the south. Portlaoise is the nearest town at approximately 5km to the west.



Figure 2.1 Site Location



Holy Trinity Church is located at the bottom of the Rock of Dunamase hill to the east, approximately 60 metres southeast from the proposed site, and is enclosed by mature tree vegetation and boundary walls. Dysart Woods and Carrigmeal woodlands are located circa 600 metres to the southeast and 1.2 kilometres to the southwest and comprise walking trails to local visitors, however, these are not connected to the Rock of Dunamase.

The proposed site is approximately 2.5 hectares in size and is located within an arable field that is broadly rectangular in shape, set within an agricultural setting with few detached houses and narrow local roads scattered along the existing landscape.

The localised topography of the site is gently sloping towards the north (Figure 2.3), with a steep limestone outcrop to the southern boundary, where the Rock of Dunamase is situated. These steeps slopes surrounding the existing monument include a dense native woodland (Figure 2.3), with species such as Hazel (*Corylus avellana*), Common Oak (*Quercus robur*) and Wllow (*Salix* sp.). The woodland is identified in Map 11.5 of the Laois County Development Plan 2021-2027 (CDP) as a 'Significant Tree Group'. Although this woodland is located outside of the proposed site boundary, its protection will be ensured as per the objectives and policies BNH25 to BMH 30, DM BNH 4 and DM BNH 5 of the CDP.



Figure 2.2 View towards the west, from the existing site access gate along the eastern boundary.





Figure 2.3 View towards the west, showing existing Significant Tree Group surrounding the Rock of Dunamase limestone outcrop.

Within the site, mature intermittent tree lines are located across the eastern and western boundaries, with some scattered trees situated along the northern boundary (Figure 2.4). A tall, pruned hedge, with portions of stone wall across the northern and eastern boundaries, borders the field with the adjacent local roads. The site is currently accessed via a gate along the eastern boundary, with the field being generally enclosed otherwise. The existing stone walls have been engulfed by the existing boundary hedge as well as ivy throughout.



Figure 2.4 View towards the south, showing existing trees and hedge along field boundary.



3 Proposed Development

3.1 Description of the Development

The development comprises the items listed and shown below in Figure 3.1.

The proposed development will consist of:

- A new 48 space asphalt surfaced car park and associated landscape proposals.
 Car park to be constructed on fill elevating the surface approximately 1m above the existing topography at its northern extent;
- 4 no. bay bus parking area;
- Picnic areas accessed from the car park via new footways;
- Wetland feature to north of car park to function as stormwater attenuation;
- Perimeter bund to the northern boundary to retain stormwater from the car park in extreme flood events;
- Widening of adjacent existing carriageways servicing the site;
- Resurfacing of access roads to Rock of Dunamase for increased accessibility.

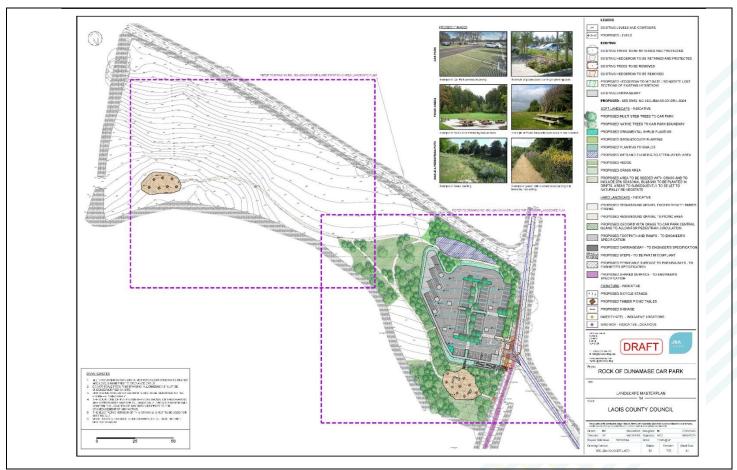


Figure 3.1 Proposed Landscape Masterplan (Refer to Drawing no. ISG-JBAI-XX-XX-DR-L-0001)



3.2 Design Approach

The landscape design proposals (Figure 3.1 in previous page) are prepared to respond to the existing context and character of the site, while providing screening to the site and enhancing the existing landscape and biodiversity. In addition, the landscape proposals provide amenities for all those who visit the heritage site of the Rock of Dunamase and choose to use the proposed car park. It is intended that the landscape scheme will make a positive contribution to its environs and to all visitors to the existing monument. Boundary treatments to the existing site and proposed amenities have had an important part in the design in order to provide screening of the new elements from surrounding areas as well as enhance the existing woodland to the south via new native tree planting and the provision of multiple insect hotels and bird boxes.

The proposed car park is a direct design response to the requirement for the immediate surrounds to the Rock of Dunamase to offer formal car parking. It is an objective of the Laois County Development Plan 2021-2027 to set out special measures to make the Castle more accessible to the public, which is being addressed in this proposal with the provision of 48 no. new parking spaces. The new formal parking area provides a wider offer for visitors and removes the requirement for the informal parking south of the existing Holy Trinity Church.

The proposed car park design intent is to have a more naturalistic geometry, and providing permeable paving for a more sustainable approach. Permeable paving can be in the form of geogrid with a grass finish, (Figure 3.2) which softens the proposals and better connects visually with the surrounding environs.



Figure 3.2 Precedent image of a car park with permeable grass paving

In order to further enhance this space, parking bays are interrupted with planting beds which include ornamental shrub planting and multi-stem Birch trees (*Betula pendula*). The centre island comprises reinforced grass which leads to a central footpath, directing pedestrian users to the dedicated footpaths that lead to the Rock of Dunamase or to the two picnic areas provided. Species selected for the ornamental shrub planting beds include low height shrubs and grasses with seasonal interest, and appealing to native pollinators and invertebrates in general (All Ireland Pollinator Plan), such as *Deschampsia cespitosa* 'Golschleier', *Cornus sanguinea, Rosmarinus officinalis, Salvia*



'Caradonna', Sarcococca hookeriana var. humilis, Viburnum davidii and Vinca minor (as per Figure 3.3 below, shown in the same order as listed).



Figure 3.3 Proposed Ornamental Shrub Planting

Due to the gently sloping nature of the site, which is being generally retained, swales are proposed along the southern and western boundaries of the car park to deter stormwater from freely draining into the parking area. These swales, together with the attenuation area at the northern boundary, and thus at a lower elevation, include wetland planting to further enhance these elements and assist in water infiltration into the soil. Species selected are generally kept low, while also providing a spray of colour and texture to the grassland and groundcover areas in the immediate landscape.



Figure 3.4 Example of swale planting within a grassland landscape setting

Wetland species include Allium cernuum, Aster amellus, Betonica officinalis, Galanthus elwesii, Iris pseudacorus, Juncus 'Carmen's Grey', Leucanthemum vulgare, Lychnis



flos-cuculi, Lythrum salicaria, Sanguisorba officinalis, Scabiosa columbaria subsp. ochroleuca and Succisa pratensis.

The other eastern and northern boundary proposals are more focused in providing screening from the local roads into the proposed car park. Screening proposals to the east also mitigate potential vegetation loss due to the visibility required for vehicular egress. In areas where vegetation has been lost to provide access into the car park or to widen the existing carriageway, new hedgerow and tree planting are proposed. Furthermore, the understory to all tree planting along the northern and eastern boundaries comprise shade tolerant groundcover planting to further enhance these spaces.

Groundcover planting include the following shrub, grasses and fern species: *Ajuga reptans*, *Campanula lactiflora*, *Liriope muscari*, *Luzula nivea*, *Origanum vulgare*, *Polystichum setiferum*, *Polypodium vulgare*, *Viburnum davidii* and *Vinca minor* (as shown in Figure 3.5 in the same order as listed).



Figure 3.5 Proposed Groundcover Planting

To further respond to the requirement to increase visitor access to the Rock of Dunamase, two picnic areas have been included in this proposal. Both are accessed



from the car park via a loop of resin bound pedestrian trails. Where ramps or steps are required, these will comply with the Technical Guidance Documents, Part M.

Each picnic area is set in a unique landscape setting. The eastern picnic area is placed in a woodland character, offering an enclosed experience surrounded by nature (Figure 3.6), however, views up to the Castle are still present. The shape of this picnic area is inspired by the Rock of Dunamase boundary, with its ruins replicated as timber logs and shaped boulders.



Figure 3.6 Example of a picnic area enclosed by mature woodland

The other picnic area is located on the far west corner of the existing field, in a vantage point at a higher elevation. This location offers extended views to the north, providing a distinctive experience to the local visitors (Figure 3.7). Glimpse views to the Castle are present in this location, and the car park becomes hidden to the east by the proposed tree planting surrounding this built element.



Figure 3.7 Example of a picnic area with open views in one direction



Signage boards are proposed in both picnic areas which can include information relevant to its location, such as history, archaeology, biodiversity and surrounding views.



Figure 3.8 Proposed Trees

The importance of the existing landscape setting due to the proximity of the proposal to the Rock of Dunamase, requires a sensitive approach to the landscape design. Trees species (Figure 3.8) were selected to enhance the existing woodland vegetation of the Rock of Dunamase slopes, provide screening to build elements, and to cater to the specific requirements such as light exposure, soil moisture and root system behaviour. Therefore, species such as Alder (*Alnus glutinosa*), Birch (*Betula pendula*) and Willow (*Salix cinerea*) are proposed in proximity to the proposed swales and



attenuation area, whereas Prunus species (*Prunus avium* and *Prunus padus*) are kept clear of footpaths. The existing woodland (Significant Tree Group) is enhanced and extended to the north with the use of the same species, such as Hazel (*Corylus avellana*), Sessile Oak (*Quercus petraea*), Common Oak (*Quercus robur*) as well as additional native species such as Birch (*Betula pendula*), Scots Pine (*Pinus sylvestris*), Wild Cherry (*Prunus avium*) and Bird Cherry (*Prunus padus*). In the interest of biodiversity, added value is provided in the form of bird boxes and insect hotels spread throughout areas where tree clusters or woodland is proposed.

3.3 Planting and Maintenance

Supply and planting for this site will be in accordance with the planting schedules and soft landscape specification to be detailed in the work requirements. An outline planting schedule is included in this landscape package. The planting will be native and low maintenance, apart from proposed screening hedges that will cater to the same maintenance regime as the existing boundary hedges.

Areas where soil movements are required due to building or planting activities, new grass will be seeded to include 20% of a native seasonal bulb mix. These areas are to subsequently be left to naturally re-vegetate.

In the interests of sustainability and environment, planting and landscape proposals will be designed to minimise maintenance and specialist care, through the use of shrubs and trees, rather than annual displays or horticulturally intensive elements. In this way, inputs of fertiliser and pesticide are reduced.

4 Conclusion

In general terms, the scheme aims to respect the context of the existing site and further enhance it with the provision of additional native tree planting and ornamental shrub planting, which will frame and screen the hard proposals from adjacent areas.

New amenities such as the two new picnic areas will offer new seating elements to the landscape, where visitors can pause and utilise the space prior or after visiting the Rock of Dunamase. These are framed by existing and proposed native woodland, and views to the Castle as well as views to the north, in the case of the westernmost area.

The landscape proposals aim to create wildlife habitats through the appropriate choice of plant materials and through the use of native species. Native broadleaf trees, as well as bird boxes and insect hotels, will be used extensively to facilitate biodiversity and to attract the broadest possible range of wildlife into the boundaries.



Offices in Dublin Limerick

Registered Office 24 Grove Island Corbally Limerick Ireland

+353(0)61 345463 info@jbaconsulting.ie www.jbaconsulting.ie Follow us: in

JBA Consulting Engineers and Scientists Limited

Registration number 444752

OHSAS 18001:2007

JBA Group Ltd is certified to: ISO 9001:2015 ISO 14001:2015







