

Biodiversity Net Gain Strategy

Proposal: Agricultural storage building with integral domestic garage, and polytunnel
Site: Southview Farm, Widbrook, Bradford-on-Avon. BA15 1UH
Our Reference: 2499B_BNG_strategy_v1

1.0 Introduction

- 1.1 This document should be read in conjunction with the Biodiversity Gain Plan and Post Development Plan presented in support of application reference PL/2026/01531.
- 1.2 The Council's Ecology Officer has confirmed that the completed on-site baseline habitat assessment is accurate and that the pre-development (baseline) biodiversity value is 0.5737 Habitat units and 0.0537 Hedgerow units. Further details of the proposed mitigation measures to meet the BNG requirement have been requested, specifically;
 - 1.2.1 Proposed tree and shrub planting
 - 1.2.2 Proposed grassland mix
- 1.3 The Ecology officer has also requested confirmation of any external lighting proposed in connection with the development. These details are set out below.

2.0 Proposed tree planting

- 2.1 23no. trees comprising 12no. Wild Cherry (*Prunus avium*) and 11no. Crab Apple (*Malus sylvestris*) will be planted at random spacing, no less than 2.5m apart, along the western margin of the application site.
- 2.2 Individuals will be planted as feathered trees of around 1.2m in height, between November and March (inclusive) in pits deep enough to ensure the root collar is level with the surface of the ground.

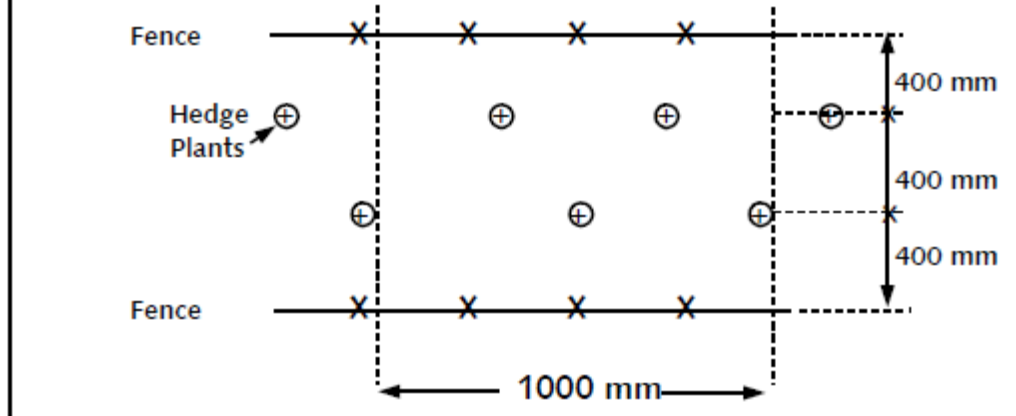
- 2.3 Rabbit guards will be employed to protect the young trees and, they will be staked if necessary.
- 2.4 The trees will be maintained over the five years following planting, watered through dry periods and kept weed-free through cutting and mulching. Any diseased or dead individuals during this period will be replaced with a similar specimen.

3.0 Proposed hedgerow planting

- 3.1 All hedgerow planting will be carried out in accordance with BS4428:1989, Code of practice for general landscape operations (excluding hard surfaces).
- 3.2 Hedgerow shrubs will either be notch or trench planted between November and March. Hedge trenches will be dug to a minimum depth of 400mm and width of 600mm, ensuring that the root collar of the plant is level with the surface of the ground when completed. All plants will be well heeled in after planting and watered in during dry weather. (If supplied as bare root specimens, ensure that the roots do not dry out by keeping them under a moist cloth or in a bucket of water during planting. Avoid planting in very cold or wet weather).
- 3.3 A native mixed species hedge of 70% Hawthorn (*Crataegus mongyna*) and Blackthorn (*prunus spinosa*) interplanted with 30% of the following;
 - Hazel (*Corylus avellana*)
 - Holly (*Ilex aquifolium*)
 - Dog Rose (*Rosa canina*)
 - Field Maple (*Acer campestre*)
 - Dogwood (*Cornus sanguinea*)
 - Spindle (*Euonymous europaeus*)
 - Wild Privet (*Ligustrum vulgare*)
- 3.4 Stock will be sourced as transplants or quicks, will be planted in a staggered double row at a density of not less than 5no. per metre, plant at 300-400mm between rows and 400mm apart in the row (as shown below).

Diagram 1- Planview

Planting & Fencing pattern



3.5

- 3.6 The newly planted hedge will be protected from grazing stock and wildlife with a post and wire fence no less than 1.4m high to enclose the hedge during its establishment. The area will be maintained weed free using mulch to a depth of 100mm, for at least two years following planting.

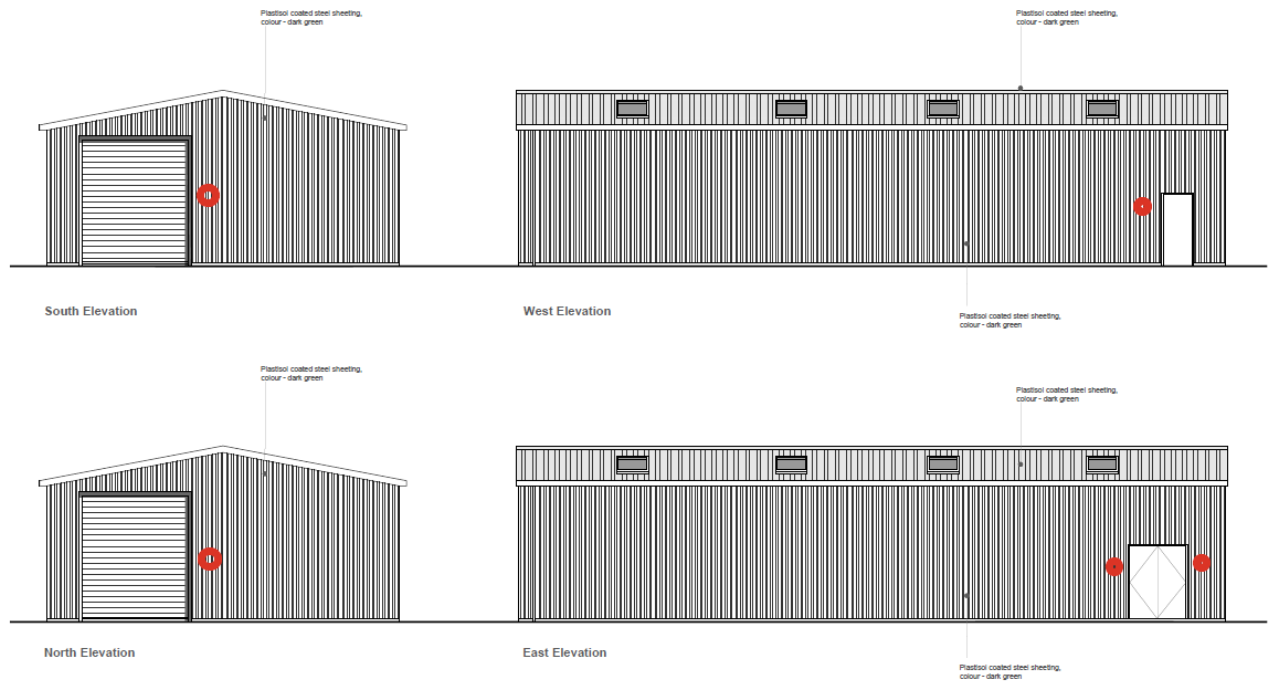
4.0 Proposed grassland mix

- 4.1 Following completion of the building and associated hardstanding, the remaining areas will be overseeded with a flowering meadow wildflower mix, and kept moist for the first 6 weeks following sowing. The seeded area will be cut in autumn following establishment of the sward and in early spring and autumn thereafter.
- 4.2 Cutting will take place in dry weather; cuttings will be left for 5 – 7 days to allow seeds to drop, before being removed to a compost.

5.0 Proposed external lighting

- 5.1 Limited external lighting is proposed to the building; 5no. Baker Series 'Dark Sky Bulkhead' lights will be located on the external walls of the building as per the plan below with red circles, no higher than 2.0m from ground level, fitted with 2700K bulbs. The specification for the lighting is attached at Appendix 1.
- 5.2 The lighting will be operated by motion sensor with a shut-off of no more than 5mins.

- 5.3 The directed lighting will flood the wall of the building directly below the unit, limiting spread of light onto adjacent habitat, and blocking upward light pollution.
- 5.4 Should any further information be of assistance please contact the Agent.





Appendix 1

Baker Series Dark Sky Bulkhead specifications

Architectural Fixture for Residential Outdoor Lighting

This sleek, modern fixture complements a wide range of architectural styles, blending effortlessly into both contemporary and traditional homes.

Its recessed, downward-facing design delivers full cutoff illumination with zero uplight, making it Dark Sky-compliant and ideal for minimising light pollution. With an energy-efficient 10W output, it offers subtle, ambient lighting perfect for pathways, entryways, and accent areas.

CE & RoHS
international product marks

Baker Series *Dark Sky Bulkhead*



CDN:SPEC236REV1



◀ Technical Specifications Summary

Performance Summary:

Code (Series-Wattage/Size)	BAK-10
Nominal Power	10W
Luminaire Efficacy @ CRI>80, 3000K CCT	33lm/W
Lumen Output @ CRI>80, 3000K CCT	330lm
Lumen Maintenance (TM21 Reported)	L80B10 ≥50,000 hours
Certification	CE, RoHS
Product Warranty	3 Years

Light Source and Photometric Parameters:

Chip Brand, Model, & Size	Cree
Light Emission	Direct
CCT	4000K (2700K, 3000K, 5000K, 5700K Optional)
CRI	≥80Ra, (≥90Ra optional)
SDCM	<3
Diffusers	Clear
Symmetric Light Distribution	60°

Electrical Parameters¹:

System Operating Power	8W
Input Voltage	220-240VAC
Input Frequency	50-60Hz
Qty of Drivers per Light	1
Insulation Class	Class II

Environmental Parameters:

IP Rating	IP65
IK Rating	IK08
Ambient Usage Tolerance	-10°C to 45°C
Ambient Storage Tolerance	-20°C to 60°C

Physical/Mechanical Parameters:

Product Dimensions: (Ø x H) (mm)	230 x 54
Fixture Primary Material(s)	Aluminium Alloy
Lens(es) Materials	UV Stabilised Polycarbonate

Options/Accessories:

Mounting Styles	Surface mounted
Available Product Colours	Grey, Black

¹ Electrical Parameter data is for D1 drivers, unless otherwise stated

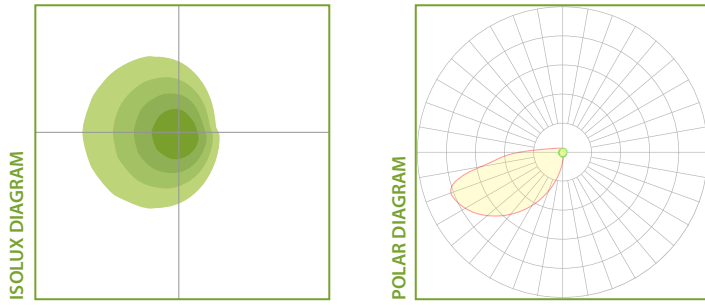
All stated values should be considered indicative only. Technical data is provided from sample luminaires and construction components as assessed by OEM(s) under industry-standard, laboratory conditions. In practice, stated values can vary. Kellwood Lighting operates a policy of continual product improvement. Our luminaires' capabilities are regularly enhanced to outperform in-class market alternatives. Please contact our technical team directly for clarifications prior to purchase. All images depicted should be considered indicative only. Stated product warranty periods do not include associated labour costs. Stated product warranty periods are for UK projects only. For international projects, please contact our offices directly. Optional upgrades can often affect or supersede unit technical parameters, capabilities, and warranties. It is the responsibility of the purchasing authority to ensure selected hardware is suitable for application. For further documentation, including Returns Policy and Conditions of Unit Failure, please contact our offices. Hazardous area documentation (eg. ATEX) are issued to OEM codes. Please do not look directly at LED lighting products during operation.

This datasheet & corresponding certification should be reviewed by a competent person to ensure project suitability.

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Indicative Product Photometry

Open Frame



Colour Options

The Baker series has two colour options.



Black



Grey



Standard product code fields are presented as:
Further customisation may be available - please contact us if required



Product Ordering Codes

PRODUCT	POWER	CRI & CCT	DRIVER	COLOUR
BAK	10 10W	827 CRI >80, 2700K	D1 NON-DIM	BL BLACK
		830 CRI >80, 3000K		GR GREY
		840 CRI >80, 4000K		
		850 CRI >80, 5000K		
		857 CRI >80, 5700K		
		927 CRI >90, 2700K		
		930 CRI >90, 3000K		
		940 CRI >90, 4000K		
		950 CRI >90, 5000K		
		957 CRI >90, 5700K		

Product Ordering Code Examples:

BAK-10-827-D1-BL

BAK-10-830-D1-GR

GENERAL NOTES:

1. IF MORE THAN ONE MODIFICATION IS REQUIRED, SEPARATE EACH MODIFICATION WITH A HYPHEN AT THE END OF THE PRODUCT CODE
2. PLEASE ENSURE SELECTION OF COMPATIBLE DRIVER FOR OCCUPANCY SENSORS WITH DIMMING FUNCTIONALITY
3. PLEASE NOTE THAT MODIFICATIONS WHICH AFFECT LIGHT OUTPUT HAVE SEPARATE PHOTOMETRIC FILES IDENTIFIED WITH "...+(MODIFICATION)"
4. ALTERNATIVE DRIVERS MAY BE AVAILABLE - PLEASE CONTACT OUR OFFICE FOR FURTHER DETAILS
5. IF PRODUCT IS CUSTOMISED, CODES WILL BE ALTERED AS NECESSARY

