Lighting Design Scheme

Rear of Templars Farm, Holders Green Road

for

JGA Services Ltd.

15 December 2022

greenlight
environmental consultancy

Client
JGA Services Ltd.

Planning authority
Uttlesford District Council

Time limit of reliance

Please note that the reported surveys were conducted on the date(s) stated in the report and that it represents site conditions at the time of the visit. The findings and recommended mitigation are based on these conditions. If site conditions change materially after the site survey, the original report cannot be relied upon and will need to be updated. Ecological reports and surveys can typically be relied on for 18 to 24 months from the date of survey.

Surveys supporting European Protected Species Mitigation Licence applications must be within the current or most recent survey season for bats (May to September), or within two survey seasons for great crested newts (March to June).

Document	Lighting Design Scheme
Version	1.1
Date	15 December 2022
Author	Ebonie Lambo-Hills M.Sc, B.Sc (Hons), Natural England licences (Bat survey level 1, Great crested newt level 1)
Reviewer	Nathan Duszynski M.Sc, B.Sc (Hons), ACIEEM, Natural England licences (Bat survey level 2, Great crested newt level 1)

Signed disclosure

The information, data, advice and opinions provided in this report which I have provided is true and has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. I confirm that the opinions expressed are my true and professional bona fide opinions.

Etienne Swarts, ACIEEM

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Table of Contents

1. INTRODUCTION

1.1. Greenlight Environmental Consultancy Ltd. has been commissioned to compile evidence to discharge a planning condition (Application Number: UTT/22/1946/FUL, Uttlesford District Council, August 2022). The proposed development is located at Land to the rear of Templars Farmhouse, Templars Farm, Holders Green Road, Lindsell, Dunmow, Essex, CM6 3QL.

1.2. Condition 8 states:

> *"Prior to occupation a lighting design scheme for biodiversity shall be submitted to and approved in writing by the local planning authority. The scheme shall identify those features on site that are particularly sensitive for bats and that are likely to cause disturbance along important routes used for foraging; and show how and where external lighting will be installed (through the provision of appropriate lighting plans, drawings and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent bats using their territory. All external lighting shall be installed in accordance with the specifications and locations set out in the scheme and maintained thereafter in accordance with the scheme. Under no circumstances should any other external lighting be installed without prior consent from the local planning authority.*
>
> *REASON: To allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 as amended and s40 of the NERC Act 2006 (Priority habitats & species), in accordance with Policy GEN7 of the Uttlesford Local Plan (adopted 2005)."*

2. CONDITION 7 – LIGHTING DESIGN SCHEME

2.1. The ecological survey in September 2021 (T4 Ecology Ltd, 2021) indicated foraging and commuting opportunities were present along the lane to the west of the site, and along the boundary hedgerows/tree lines located south and southwest of the site.

2.2. Lighting schemes will follow guidance from the Bat Conservation Trust and CIE 150:2003. Warm-white (long wavelength) lights with UV filters will be fitted as close to the ground as possible. Lighting units will be angled below 70° and equipped with movement sensors, baffles, hoods, louvres and horizontal cut off units at 90°.

2.3. Appendix A demonstrates the proposed lighting scheme using five fixed wall downlights per dwelling (Table 1). These lights will be connected to motion sensors, short timers and a central control to further minimise temporary light spill.

2.4. Any external lighting will be situated away from the periphery, to prevent light spill and maintain bat foraging and commuting routes.

2.5. The Construction Environmental Management Plan (Biodiversity) and Biodiversity Enhancement Strategy (T4 Ecology Ltd., 2022) indicates integrated bat boxes will be installed on the east, south and southeast aspects of the plots (Appendix A). Although external lights will be positioned on the same aspects as these boxes for plots 2-4, the lights will not have any impact on potential roosting locations, as they will be located ≈3m below the box entrances, situated on the single storey extension away from the boxes and consist of downlights with motion sensors and timers.

	**Product:** Single fixed 35W wall downlight **Bulb:** GU10 warm white (3,000K) LED

Table 1, proposed light units and bulbs.

3. BIBLIOGRAPHY

International Commission on Illumination (2003). CIE 150:2003, *Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations*.

Mitchell-Jones (2004). *Bat mitigation guidelines*. English Nature: Peterborough

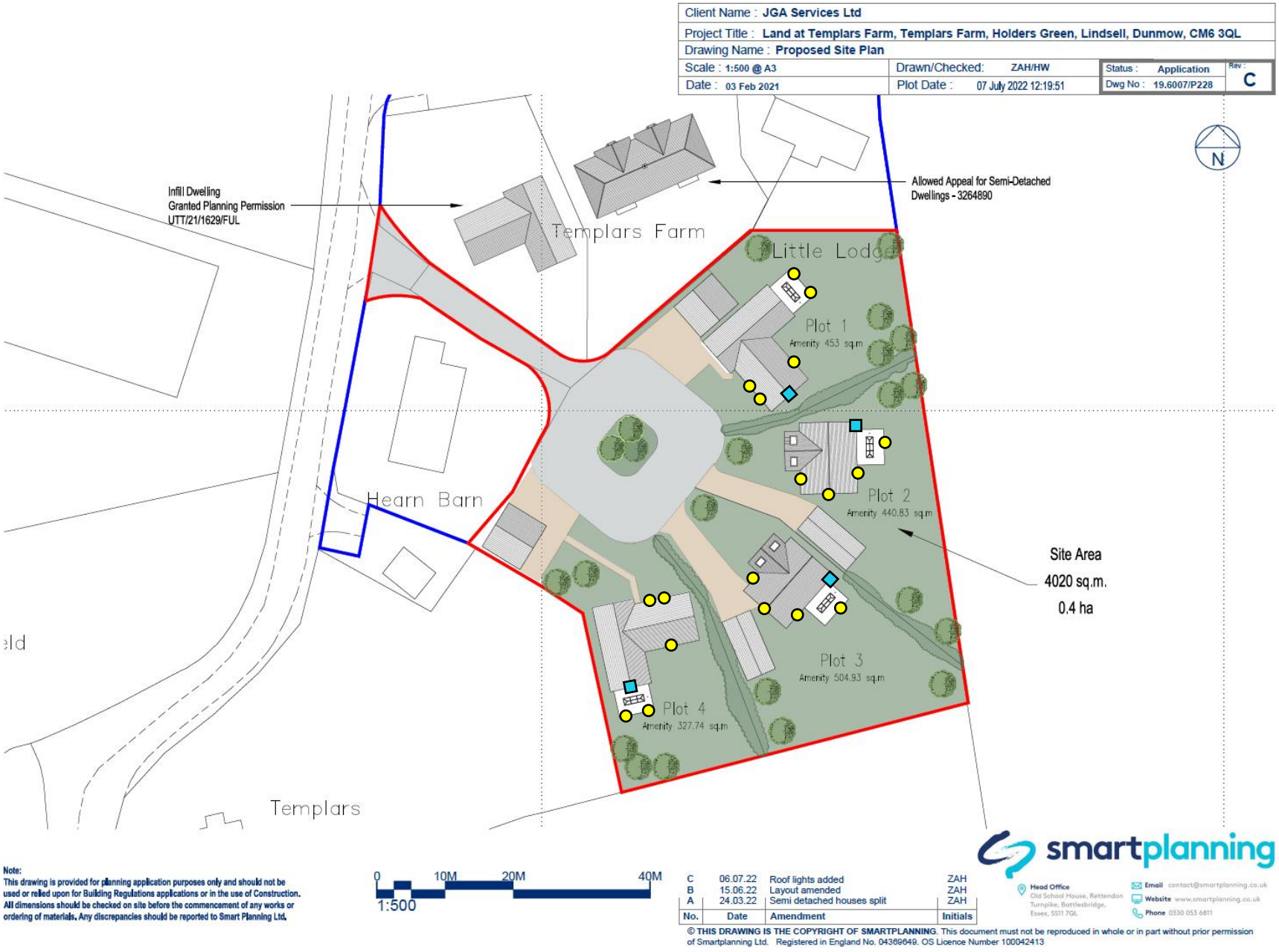
Stone, E.L. (2013). *Bats and lighting: Overview of current evidence and mitigation*. University of Bristol.

T4 Ecology Ltd. (2019). Preliminary Ecological Appraisal, Templars Farm, Holders Green, Lindsell, Dunmow, Essex, CM6 3QL.

T4 Ecology Ltd. (2021). Biodiversity Enhancement Strategy/Layout, Templars Farm, Holders Green, Lindsell, Dunmow, Essex, CM6 3QL.

Appendix A - Light locations

= external light = integrated bat box


Client Name : JGA Services Ltd
Project Title : Land at Templars Farm, Templars Farm, Holders Green, Lindsell, Dunmow, CM6 3QL
Drawing Name : Proposed Site Plan
Scale : 1:500 @ A3
Drawn/Checked: ZAH/HW
Status : Application
Rev : C
Date : 03 Feb 2021
Plot Date : 07 July 2022 12:19:51
Dwg No : 19.6007/P228
N
Infill Dwelling
Granted Planning Permission
UTT/21/1629/FUL
Allowed Appeal for Semi-Detached
Dwellings - 3264890
Templars Farm
Little Lodge
Plot 1
Amenity 453 sq.m
Plot 2
Amenity 440.83 sq.m
Plot 3
Amenity 504.93 sq.m
Plot 4
Amenity 327.74 sq.m
Hearn Barn
Site Area
4020 sq.m.
0.4 ha
Templars
Note:
This drawing is provided for planning application purposes only and should not be used or relied upon for Building Regulations applications or in the use of Construction. All dimensions should be checked on site before the commencement of any works or ordering of materials. Any discrepancies should be reported to Smart Planning Ltd.
0 10M 20M 40M
1:500
C 06.07.22 Roof lights added ZAH
B 15.06.22 Layout amended ZAH
A 24.03.22 Semi detached houses split ZAH
No. Date Amendment Initials
smartplanning
Head Office
Old School House, Rettendon Turnpike, Battlesbridge, Essex, SS11 7QL
Email contact@smartplanning.co.uk
Website www.smartplanning.co.uk
Phone 0330 053 6811
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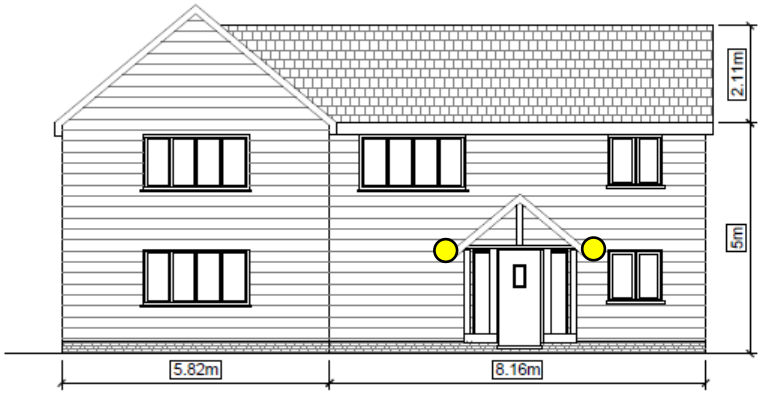
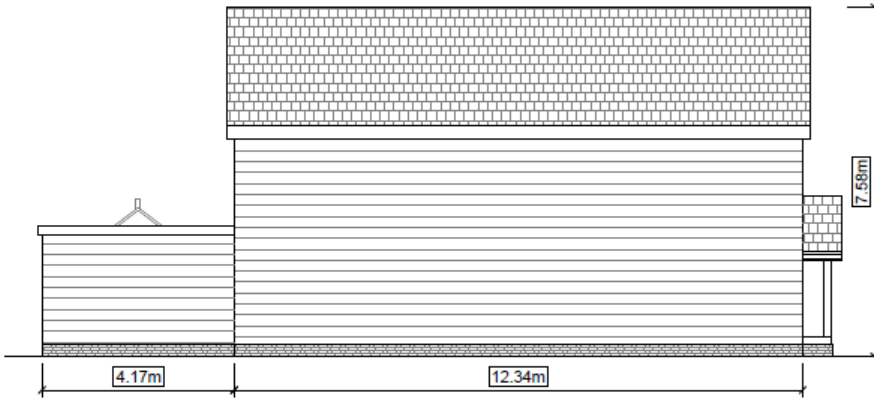
Plot one

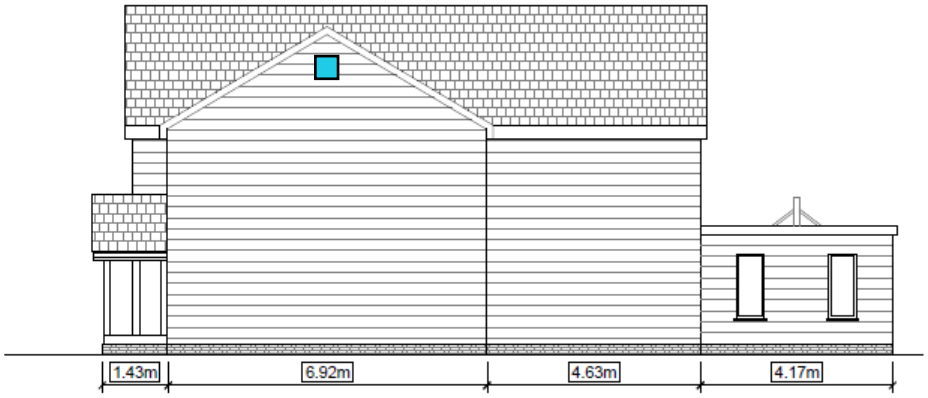


Elevation A West Elevation



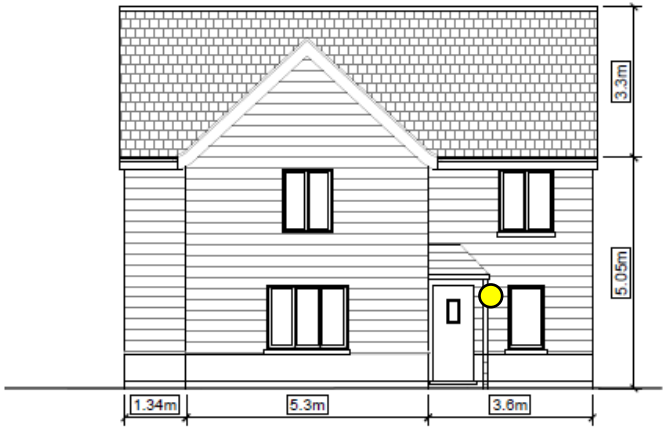
Elevation B North Elevation

Elevation C East Elevation

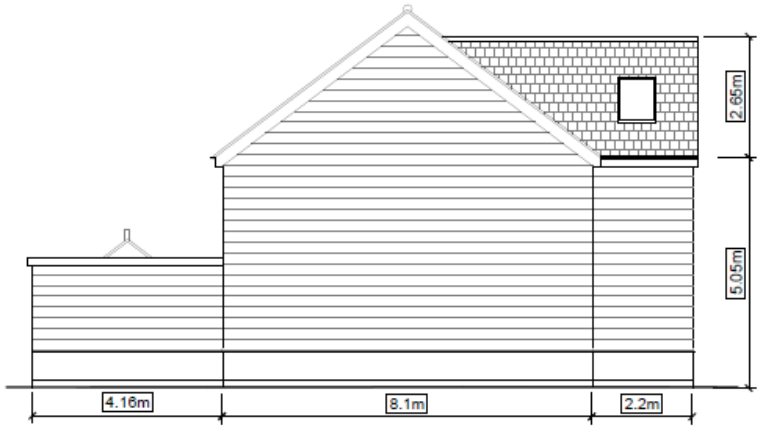


Elevation D South Elevation

Plots two and three



Elevation A West/ Northwest Elevation



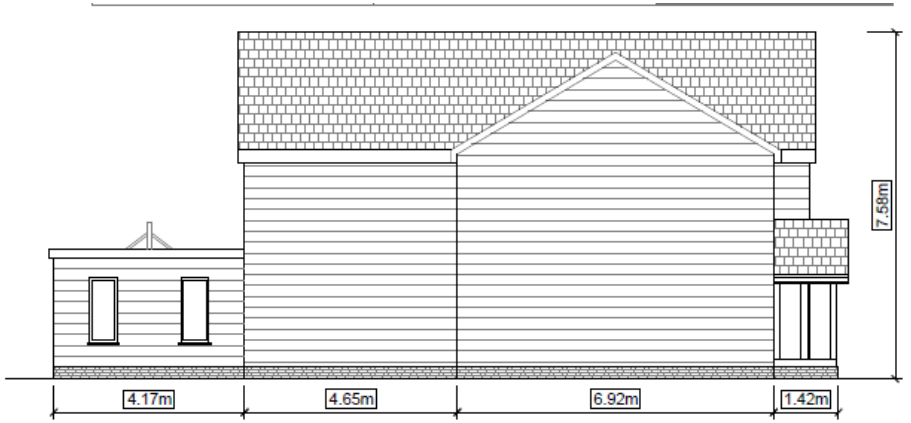
Elevation B North/ Northeast Elevation

East/ Southeast Elevation

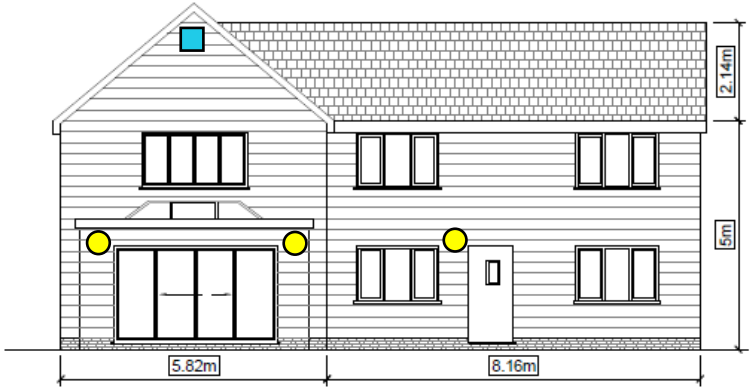
South/ Southwest Elevation

Plot four

Elevation A North Elevation



Elevation B East Elevation



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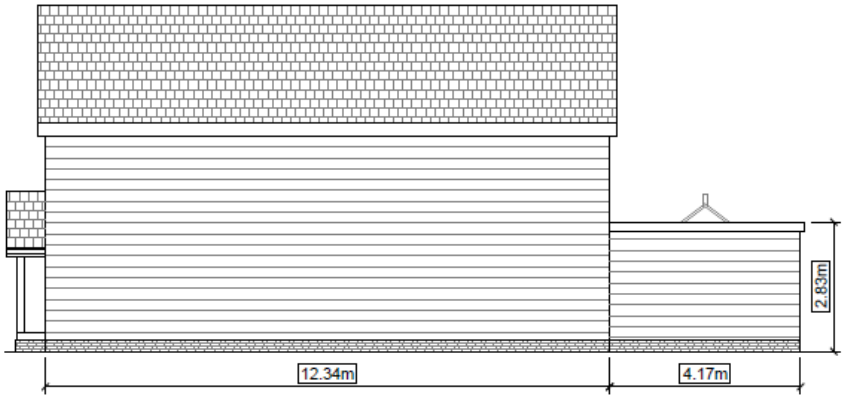

Elevation D West Elevation