EXTERNAL LIGHTING ASSESSMENT

Persephone Gardens

Camden

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External Lighting Assessment

1 Executive Summary

CBC was commissioned by LCR to undertake an External Lighting Assessment, in support of a planning application for a proposed retirement village and residential care home, at land off Gondar Gardens, London.

The proposals comprise the development of 82 residential apartments, a 15-bed care home, amenity areas and associated infrastructure.

The proposed development site is in an existing residential area. An external Lighting assessment was undertaken to define any potential impacts of artificial light sources, associated with the proposed development.

Based on the assessment results, the external lighting impacts are not considered a constraint to planning consent for the proposed development.



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External Lighting Assessment

2 Introduction

This report has been provided on behalf of LifeCare Residency, to review the proposed external lighting scheme at Persephone Gardens, Camden.

The site is designated as a *Site of Borough Grade II Importance for Nature Conservation*, therefore careful consideration of luminaire selection with subdued lighting levels have been made for minimal impact on flying Bat (mammal) species and ground/pond dwelling wild life. Thus, the approach to luminaire selection has been based upon a low level, restricted height philosophy.

Proposed artificial lighting within the defines of the development has the potential to cause impacts at sensitive receptors. This assessment was therefore undertaken to consider external lighting within the confines of the proposed development site boundary, to identify any potential impacts because of artificial light.

3 Luminaire Selection and Type

The following Philips luminaires have been selected:

| Luminaire Ref | Qty | Range/Location | Lamp | Lm/W | Lamp Colour. Kelvin | L2A Compliant | BREEAM Compliant |
|------------------|-----|---|------|------|---------------------------|------------------|---------------------|
| А | 19 | LED Ilti Luce Daf Recessed 'brick light' Pedestrian-main entrance & courtyard access stairs | 4.2W | 94 | 3000K | Yes | Yes |
| В | 49 | LED Modular Portfolio Bollard Central courtyards & Car Vehicular access | 4.3W | 116 | 2700K | Yes | Yes |
| С | 6 | LED CoreLine IP65 circular white MOE/Exit-lobbies abutting courtyards | 18W | 67 | 4000K | Yes | Yes |
| D | 2 | LED CoreLine IP65 batten Cycle rack storage | 23W | 87 | 4000K | Yes | Yes |

Lighting Results.

The average external lighting levels achieved within the proposed site development & boundary is an Eave of 3.2 Lux. Refer also appendix 4.1 to for lighting design proposal.



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4 Luminaire Control Philosophy

To prevent night time lighting pollution and to comply with POL 04/L2A, a combination of photocells & timeclocks shall be installed to the lighting system.

The courtyard luminaires shall operate as follows: - Timeclock 'off' between the hours of 23:01-06:59. Between the hours of 07:00-23:00, the timeclock shall allow luminaires to be operational, but the photocell shall not allow the luminaires to energise during 'daylight' hours. Note, an override facility 'on' shall be installed to allow 'care' staff to navigate courtyard areas during 'out of hours' time periods.

The car vehicular access area luminaires shall operate as follows: - PIR (movement sensors) shall be utilised for energising luminaires, with a photocell to 'hold off' lighting during 'daylight' hours.

5 Conclusion

External lighting to the central court yard at level -02, has been carefully located thus to ensure there is no light spill into the adjacent *Retention* Pond.

External lighting to the car vehicular access area, again has been carefully located such that there is no lighting spill on to site boundary residential properties.

No maintenance roof lighting has been selected for the scheme, this again to ensure there is no impact with any flying Bat species. To mitigate omission of roof lighting, 230 Volt small power supplies shall be located within M & E plant areas for any essential works maintenance 'plug in' portable 'task' lighting.

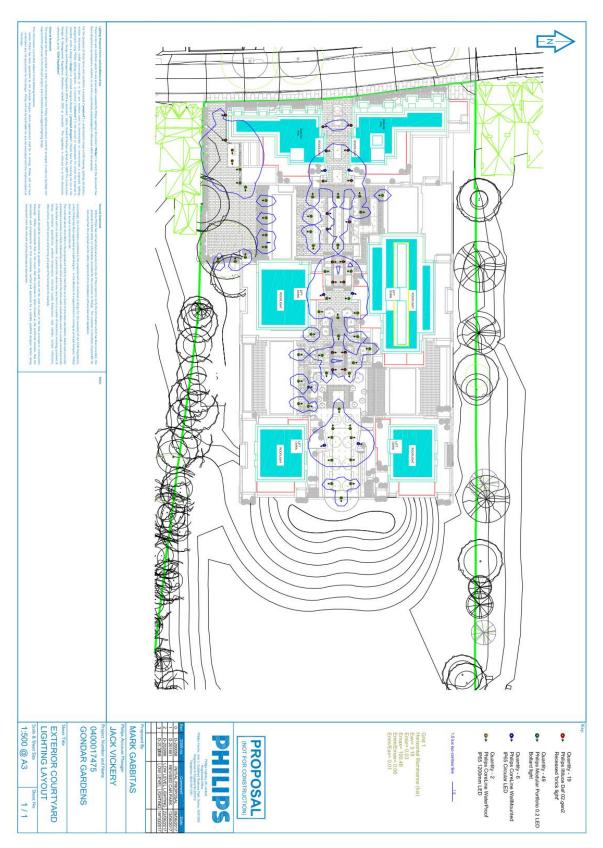
The luminaires selected are a combination of low-level LED bollard and low-level LED recessed wall luminaires, which comply with BREEAM requirements; Pol 04 (Reduction of night time light pollution), ENE 03 (External lighting) & Part L2A of the building regulations.



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6 Appendices

4.1 Lighting Design





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4.2 Luminaire Type A



4.3 Luminaire Type B







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4.4 Luminaire Type C



4.4 Luminaire Type D

