Proposed Lighting Scheme

Assessment

to support the Planning Application

for

the erection of one dwelling

on

Land with Stables Myerscough Hall Drive

Bilsborrow

(350742E 440250N)

A description of the proposed lighting

The proposed application is for a residential dwelling sited on a plot that is already in use as an existing stable block, car park and menage. A lighting assessment was approved as a condition when planning permission was sought for the stables. The stables, car park and entrance has lights installed and therefore minimal outdoor lighting is required for the front of the property.

No floodlighting will be installed to the site.

It is important to ensure there is adequate illumination of the external areas, whilst also ensuring the lighting is sensitive to the area and wildlife and light pollution is kept to a minimal.

Internal lighting will reflect back into the property from the windows, in addition blinds and curtains will be drawn in the evening so there will be minimal spill from internal lights.

The lights chosen for the outdoor of the dwelling will be downlights, these point in the direction of the floor only. There is no light upwards of the unit to avoid light spillage outside of the immediate area intended to be lit up.

It is proposed there will be two small downlights at either side of the front and back porch (Luminaire A).

There will be small downlights around the perimeter of the property (6 in total – Luminaire B), two at the eastern side, two at the western side and one at either end at the rear of the property.

Timers will be installed to ensure automatic turn off in the early evening. The bulbs will be LED, warm white and dimmable, the lights will be independently connected in pairs, so they are used in isolation and only when required.

Luminaire specification and shielding examples				
Luminaire	Proposed Location	Characteristic		Image
Luminaire A Orlight Downlight (only) 3010-s	Front of proposed property at either side of the door on the porch.	Upward light	0	
		Wattage	5W	
		Colour Temperature	3000k (warm white)	

LED bulb				
Luminaire B Bega Lighting 24 370 KS Wall Light Graphite LED	Property Perimeter (2 x east, west and rear of property)	Upward Light	0	
		Wattage	8w	
		Colour Temperature	3000k (warm White)	

Energy efficiency – the design has considered appropriate optic settings for the development layout ensuring (as practicable as possible) light is only provided where required. The total wattage is 68 watts if all the lights were in use which is very low and energy efficient, although it is highly unlikely the lights will be in use at the same time.

Light pollution (vertically and horizontally) has been minimized as much as possible through careful luminaire selection. The design follows the principles set out in the ILP Guidance Notes for the Reduction of Obtrusive Light GN01:2020 and conforms with Environmental Zone E2 (low district brightness).

The proposed units have an upward light Ratio of zero which is below the 2.5 maximum permitted.

Locality

There are no neighbouring properties or roads that will be impacted by the development. No trees are being removed from the site. The dwelling is protected by established hedgerows which act as a shield, in addition the lighting planned is minimal and this has been sensitively chosen to protect the ecology of the surrounding area.

Ecology

Although Bats have not been highlighted as an issue, the site has been lit considering the impact on bats and the surrounding ecology.

Points from the ecological survey

Para 7.4.1. Work at night should be restricted, lights spill onto the boundary should be minimised.

Response – *there will be no work carried out in the evenings, 4.30pm will be the finish time for construction. The dwelling will be sited between 8-9 meters away from*

the eastern boundary. The downlights are well controlled and will only light the immediate vicinity of outside the home and this will not exceed a diameter of 2 meters. There will be minimal light spillage with the units that have been chosen.

7.4.2. A sensitive lighting scheme should be adopted for the site, as the long-term impact of unnecessary bright or recurrent artificial lighting on both bats and their prey is rarely ever positive. We recommend the following –

All construction and security lighting will be limited to the areas where it is an absolute necessity for the purpose of health and safety.

Response – Accepted, light for construction purposes will be kept to an absolute minimum and the hours of construction will be between 8am-4.30pm (8am-4pm during winter months). Security lighting will not be used.

All artificial lighting should be low intensity and face downwards. No artificial lighting should face the Lancaster Canal BHS.

Response – Accepted, the proposed dwelling is 30 meters away from the Lancaster canal. The canal and the tow path are located atop a bank higher than the proposed dwelling which is an added protection. The lights chosen are downlights and there is zero light above the unit, the light will not spill outside of the immediate vicinity of the home more than 2 meter diameter. There are several fruit trees shielding the canal from the development as well as thistles and an established and prominent hedgerow.

The lights will be used in isolation and only when required.

Consider the use of LED luminaires, which shine with a lower intensity and higher dimming capability.

Response - Accepted and incorporated (already detailed above).

Utilise shades of warm white, which appear more yellow/orange in appearance, over cold white light.

Response - Accepted and incorporated (already detailed above)