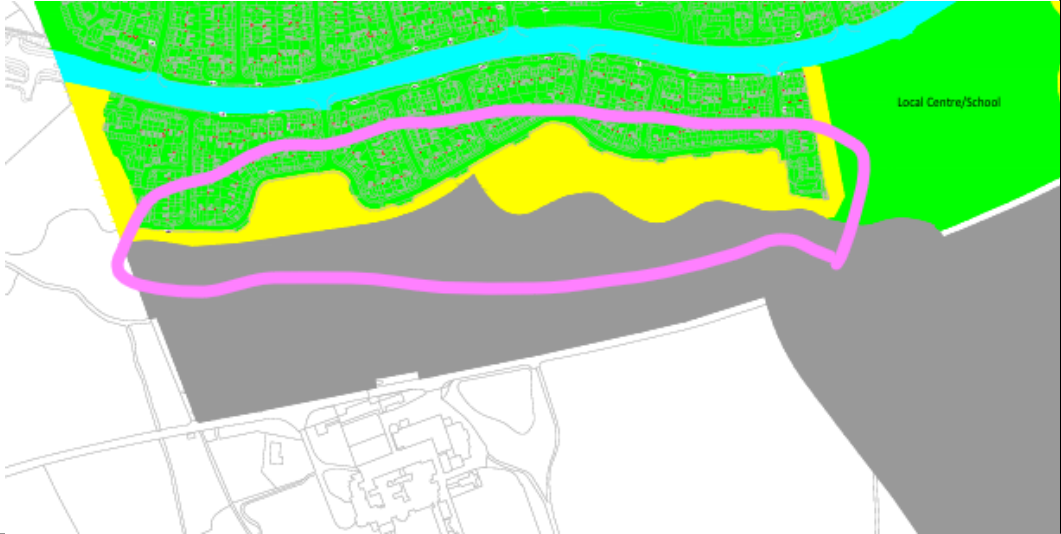


Subject:

FW: R10 lighting plan

Ecology Comment	Consultant response
The Overarching Lighting Strategy has referenced appropriate guidance from the Institute of Lighting Professionals in relation to protected species mitigation. This is good, however, I have the following concerns: i. Section 4 Lighting Strategy has the bullet point <i>“Identify key points in the landscape where artificial light at night disrupts spatial connectivity of dark areas and reduce or remove lighting in these areas if possible.”</i> Whilst it then goes on to provide a zoning approach (mapped in appendix 2), this is not clear where the key points are. Is this proposing that all yellow and grey areas meet this description as this isn't clear in their description.	Yes. Within the residential zones, hedgerows and water courses will generally not be lit unless absolutely necessary. Should lighting of these areas be required, in consultation with ecologists, key points will be identified and lighting designs adjusted to ensure lighting levels are reduced or removed all together. This is reflected in the description of the lighting for General Residential areas “Particular attention should be paid to residential areas near

	existing woodland, where the extent of adjacent Open Space is limited in depth.
i. Zone 3 SANG proposes that low level lighting bollards can be proposed in designated access footpaths. It is not clear where these designated access footpaths are. Given that the grey area on the whole (see below) matches the SANG boundary and does not include external access footpaths, I am concerned that this zone includes any option for lighting. Natural England has provided consistent advice to the local planning authority that no lighting is acceptable in the SANG. I recommend removal of lighting options in this zone and if there are access footpaths outside the SANG that require bollard lighting these should be identified (broadly) as a separate zone. ii. Zone 3 SANG (grey) needs to match the boundary of the SANG in the northern section of Holme Park SANG – see area roughly circled pink in the image snip below:	This text has been removed. No lighting is proposed in the SANG. SANG boundary has been updated in the drawing.
	
i. The final bullet point of paragraph 2.7 “<i>As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.</i>” Does not appear to be carried forward into the Section 4 Lighting Strategy. Considering the descriptions of zones 1 and 2 where light spill may need to be minimised, this mitigation method needs to be included in Section 4.	This text has been added to section 4.
Email comments	Consultant response
The DOCO provided the following comment in relation to the updated strategy, so it would be helpful if some clarity around his query could be provided please.	This lighting level is suitable for the selected lighting

Condition 24: Lighting

The amendments to the lighting scheme are noted which has resulted in an increased coverage of lighting within publicly accessible areas. However, I query the 0.6 lux level lighting proposed for residential areas of the development and would ask the applicant to confirm that this conforms with BS 5489 – 1:2020. 0.6lux is generally more appropriate for pedestrian and cycle paths and provides minimal illumination. Streets and pavements should have higher lux levels.

class of the roads (P6) in accordance with BS EN 5489 – 1:2020. The lighting performance therefore aligns with the minimum and average lighting levels for the lighting class defined in BS EN 13201- 2: 2015. Please note, 0.6 lux is the minimum lux level for the classification, which applies across the roadway and footpaths for residential lighting.

Lighting classes are also determined by the environmental zone in which the site is located to ensure lighting standards and environmental criteria

	are aligned. The lux levels are presented at ground level, where they are their lowest. However, in this scenario, the average light level across the surface would be 3.0 lux at ground level, as dictated by BS 5489-1:2020 and BS EN 13201-2: 2015.
Generally, your email below advises that the strategy has been amended to address our comments and that the strategy <i>"includes lighting solutions for adoptable areas, private drives and shared surfaces, apartment courtyards, and links to the public open space"</i>. However, I note that in Section 4, para 4.6 it is still stated that 'shared surface and private drives will be unlit'. This sentence should therefore be removed, and it should be made clear that lighting for the Zone 1 residential areas includes all street types as well as apartment courtyards, as mentioned in your email. Therefore, the Zone 1 paragraph on page 8 and the Zone 1 table on page 9 will need amending in this regard. I also note that on the Appendix 2 lighting strategy plan, there are a few areas on the R10 parcel which are coloured grey, whereas they should be green as they lie within the Zone 1 residential area.	Text has been amended to reference shared surfaces, private drives, apartment courtyards and links to public open space The grey shading was a hatch from the block paving, this has been turned off.