

From: [Glen Elgrat](#)
To: [Jamie Eckenswiler](#); becky.hillyer@grey.ca
Subject: Public Meeting Comments Re: Khanani Subdivision 42T-2023-04/West Grey OPA13/ZA21.2023
Date: September 15, 2023 1:39:22 PM

Dear Clerk Eckenswiler, Would you please see to it that my comments are shared with the appropriate Staff members and offices. And ensure they have them ahead of the public meeting on Tuesday. If further info is required to make these comments valid submissions please let me know. Thank you, Marian

Re: Khanani Subdivision 42T-2023-04/West Grey OPA13/ZA21.2023

I am writing to remind Council, Staff, Planners and Developers that West Grey declared itself a Dark Sky Friendly Community in 2016 (162-16) and the Grey County OPA #11 includes the new section 7.14 Dark Sky Protection that requires all lighting in the developments to be dark sky friendly and I have been told by Director Taylor that this clause is in effect. This policy also requires lower tier Municipalities to include a Dark Sky Policy in their own Official Plans. I would make it clear that dark sky also means a naturally dark environment and a general reduction in light pollution, this is also clear in the preamble to policy 7.14.

This development is on the edge of town next to agricultural and natural areas that do not need or want unnatural lighting at night. There are existing homes that will be impacted by the light from this development and the residents should not lose whatever view of the night skies and dark yards they currently enjoy nor should they be required to take measures to prevent light trespass from this development from entering their homes.

This is also a reminder that light pollution has a negative impact on plants too, not just humans, animals and our night sky. Please limit lighting of trees and shrubs, they need the dark hours to produce the phytochrome necessary for their long-term health.

All lighting in the new development should meet the basic requirements of zero uplight and a CCT of 3000K, but those are only the minimum requirements. The spirit of true dark sky lighting goes beyond those minimal requirements to ensure that energy usage and light pollution are reduced as much as possible.

The 5 Principles of Responsible Outdoor Lighting should be adhered to in the lighting plans:

Useful – All light should have a clear purpose. Before installing or replacing a light determine if it is needed. Consider how the use of light will impact the area, including wildlife and the environment. Consider using reflective paints or self-luminous markers for signs, curbs, and steps to reduce the need for permanently installed outdoor lighting. Seriously, ask the question, do we really need this light, is there anyone around using it?

Targeted – Light should be directed only to where needed. Use shielding and careful aiming to target the direction of the light beam so that it points downwards and does not spill outwards beyond where it is needed.

Low Light Levels – Light should be no brighter than necessary. Use the lowest light level required. Be mindful of surface conditions as some surfaces may reflect more light into the night sky than intended. The full Moon has a maximum illuminance of about 0.26 lux, but is usually around 0.1 lux and that is pretty bright.

Controlled – Light should be used only when it is useful. Use controls such as timers, dimmers and motion detectors to ensure that light is available when needed, dimmed when possible and turned off when not needed.

Colour – Use warmer colour lights (<3000K) where possible. Limit the amount of shorter wavelength (blue-violet) light to the least amount needed. Ask the lighting suppliers how much blue light is present, the IDA recommends aiming for less than 7%.

I would also recommend the following:

1. Developers are required to test the sky quality over the proposed development area and illuminance levels on the ground around the project periphery prior to building and re-test afterwards to ensure that they have not changed those values. This testing should be done under the same conditions, e.g. a clear sky, fully dark - same time elapsed after sunset, at dark of the Moon.
2. Streetlighting:
 - a. Streetlight standards should only be the minimum number required.
 - b. The light sources have a CCT of 3000K or less, there is nothing stopping using 2700K, it's available from Cree lighting and being used in Northern Bruce Peninsula.
 - c. Full or sharp shielding should be used to prevent glare, up-light and trespass into homes and yards as well as the natural environment beyond the development. Back shields are available and should be used where possible.

Why not aim for a BUG rating of B0 U0 G0?

d. The wattage on the lights should be the minimum needed and the use of dimmers for low traffic hours should be investigated. It is my understanding that there is technology available (Smart City tech) to control streetlights during off-peak hours.

3. Lighting on homes should be minimized to that required for safety. All residential lighting should meet the spirit of dark sky lighting in terms of usefulness, shielding, low wattage, colour and use of controls. Homeowners should be able to turn the lights off when unwanted. Carriage lights and other unshielded lighting styles should be avoided.

4. Decorative lighting, such as soffit lights should be avoided, this will not only prevent light pollution, but will reduce construction and operational costs, helping to make these homes more affordable

5. Unshielded wall pack lights on the sides of buildings should be prohibited. No light from any building should stray upwards or beyond the property lines.

I'm taking this as yet another attempt for West Grey to build a true dark sky, light pollution abatement showcase community. Please, let's make this happen.

As always, if there is something I can do to help, please ask.

Best regards,

Marian Ratcliffe



Save the Fireflies, turn off the lights.