#### ON TABLE February 28, 2022 - Regular Council Agenda Item: 4

**NEXT MEETING: Monday Feb 28/22** - If you wish to have your question submitted electronically you may forward questions and comments to Mayor and Council by emailing ClerksOffice@whiterockcity.ca with Question and Answer Period noted in the subject line. As of 8:30 a.m., February 23, 2022, there was one (1) Question and Answer Period submission received:

Submission from J. Arlington with a question regarding neon light strips on new property developments and whether they fall within the City's allowable parameters for brightness levels. A response from the Acting Director of Planning and Development Services is attached for information.

#### **RE: QUESTION & ANSWER period**

Feb 27, 2022 - Greetings Mayor and Council

I wish to table my question and SUPPORT J. Arlington's QUESTION regarding LIGHT POLLUTION policy.

Since 2018 advocacy by immediate neighbours with the Vidal **Parkade** FLOOD lights 24/7, council and staff found a sort-of accommodation. I hope more will be tackled soon. I brought up Light Pollution Policy at a Community Conversation with Councillors - White Rock Library 6 Apr 2019.

I observe that the new LANDMARK – Foster Martin Project has *very intrusive bright white Balcony lights 2 on each one*. I think the testing/installing progress leaves a few on now all night long. HOPE there is a Strata Bylaw or City rule about these obscuring lights being OFF unless people are using the balcony. Sadly, it's becoming a challenge to enjoy the stars & moon. The south facing Light Strips are not an aviation safety feature, thus really serve no purpose but are Ultra Urban decoration and intrusion.

# Perhaps they can be turned OFF at 10 pm, along with any superfluous lights on balconies, allowing for darker sleeps for occupants and neighbours.

Glad I do not live on Vidal across from the 12 floors of *bright 24/7 illuminated fire stair well* – impact obscures star light and I observe no birds or critters are in that are anymore. WHY these lights are not "motion activated" makes zero logic.

Other communities in BC, Canada and globally are also addressing the community impact of excessive light pollution and progressive environmental stewardship. Perhaps we can learn and adapt from them?

**I ask Council to add developing a formal Light Pollution Policy** to their working plans and committees for clarity and direction for present commercial and residential property and future development.

When I visited the development plan consultations, It was *not obvious how bright and intrusive the lighting plans* would be. I expect the Design Committee may not have been sensitive to this either.

Sincerely,

Pat Petrala

# For consideration, convenience and discussion – I offer info below.

**LIGHT POLLUTION**, or artificial light at night, is the excessive or poor use of artificial outdoor light, and it disrupts the natural patterns of wildlife, contributes to the increase in carbon dioxide (CO2) in the atmosphere, disrupts human sleep, changes the neighbourhood ambiance and obscures the stars in the night sky. It is defined as "any adverse (or bad) effect as a result of man-made lights. Usually, this means too much light. Several species, including plants and humans, are badly affected by light pollution.

# EXAMPLES of light pollution:

Glare – excessive brightness that causes visual discomfort. Skyglow – brightening of the night sky over inhabited areas. Light trespass – light falling where it is not intended or needed. Clutter – bright, confusing and excessive groupings of light sources.

## **IMPACTS** are cumulative

It is defined as "any adverse (or bad) effect as a result of man-made lights. "Usually, this means too much light. Several species, including plants and humans, are badly affected by light pollution. Light pollution threatens aquatic ecosystems by increasing the risk of harmful algae blooms. Artificial light has several general effects on wildlife - Attracts some organisms (moths, frogs, sea turtles), resulting in them not being where they should be, concentrating them as a food source to be preyed upon, or just resulting in a trap which exhausts and kills them. Light pollution contributes to climate change, too, by adding excess heat into the air.

It also impacts our human quality of life by eradicating our access to the wonder of beautiful night skies. It affects normal human physiology in a profound way such as sleep and growth. With light we can affect mood, improve sleep and treat depression. But light also has a direct alerting effect and can affect productivity, learning and memory consolidation. Physicians and Counsellors advise people to turn OFF cell and computer bright light technology well before their normal bed time and avoid having devices near the bed. Opticians are seeing more people with eye damage from excess exposure.

BLACK OUT drapes used during WWII have become increasingly popular new product in demand for urban centers and shift workers. I used to enjoy gazing at the dark sky from my bed, with window open a bit for air.

# How Can We Fix Light Pollution?

The first step in solving light pollution is education. For people to become part of the solution, they must be taught and fully understand the full consequences of light pollution.

The next step is action. *Light pollution can be controlled by better zoning*, and considering where light sources are placed. Changing the TYPE of bulbs used for street lamps, homes, signs, and businesses can make human illumination more efficient and less damaging.

## What's Limiting Implementation?

Redesigning and replacing systems that already exist can be expensive, and old habits are difficult to change. People and institutions are slowly learning and acknowledging the consequences of light pollution, and recognizing that preventative measures can actually save money in the long run. As education and attention to light pollution increases, we will get better at reducing our impact.

#### **1. Energy Cost Reduction**

By using natural light and decreasing electricity usage in the summer by using heat rejecting window films will greatly reduce your cooling costs. The same idea applies in the winter when heat retention is increased, keeping your employees comfortable and productive while reducing your heating costs by a significant margin.

#### 2. Social Responsibility

Protecting the environment is a large part of corporate social responsibility, which means that a large majority of your customers are hoping to preserve the ecosystem whenever they can. Going green and saving energy is going to attract a strong customer base. According to Environmental Leader, about 53% of consumers prefer to interact and buy from a company with a green reputation. And, not only are green companies a preference for customers, but for prospective employees as well.

#### 3. Tax Relief and Government Funding

The Canadian Government offers funding and grants to business who are actively trying to increase their energy efficiency Implementation Funding is available to large commercial, government, and institutional customers to reduce the capital cost of implementing electrical energy efficiency projects. Along with initiatives that help owners of medium to large buildings *study different energy saving systems,* there are a wide variety of programs available to give you financial support as you explore ways to increase energy efficiency.

OFFICIAL DARK SKY (perhaps - in future for our pier and promenade from mid night to dawn?)

McDonald Park, in Abbotsford, British Columbia, Canada, is a dark-sky preserve, designated thus by the Royal Astronomical Society of Canada. The park is located in a valley, and at night light pollution from the nearby cities of Abbotsford, Chilliwack, and Mission is blocked by Sumas Mountain

**Dark-Sky Preserves** are protected areas that make a special commitment to protect and preserve the night, reducing or eliminating light pollution in all forms. There you can view the stars and the night sky without light pollution. Generally speaking, the farther you can get away from bigger cities, the better. A dark sky preserve is a protected space that reduces or eliminates light pollution, and makes a commitment to preserve the night sky. You'll have the best chance at seeing the most stars, the moon, galaxies, constellations, and other special night sky occurrences like the Northern Lights. host astronomy talks and telescope viewing parties.

Some of the most responsible *dark sky viewing practices* include:

Turn off any lights when they aren't in use

Don't install any lighting on your campsite

Don't use solar-powered garden lights that stay on all night

Use red cellophane over your flashlight as it helps retain night vision and is less disruptive than white light