

Motion Re: East Village Phase 5 OPA/Rezoning
From the Sustainability and Climate Change Advisory Committee

WHEREAS the world is in a state of climate crisis, with, according to the International Panel on Climate Change (IPCC), 10 years to stop the increase in global warming from exceeding 1.5 degrees C. As the IPCC reports, exceeding an increase of 1.5 degrees C would have dire consequences for human survival – heat, drought, storms, flooding, forest fires, etc; and

WHEREAS buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption and nearly 40% of total direct and indirect CO₂ emissions; and that energy demand from buildings and buildings construction continues to rise, driven by improved access to energy in developing countries, greater ownership and use of energy-consuming devices, and rapid growth in global buildings floor area, at nearly 3% per year ¹ ; and

WHEREAS the UN Special Rapporteur states that courts are beginning to play a role, enforcing human rights obligations in relation to the climate crisis, and that there have been climate lawsuits based on human rights in at least ten countries, including Canada, ²; and

WHEREAS it is more economical to incorporate sustainable features at the sub-division development stage than install through retrofit later; and that energy use reduction should also save the home dweller on operating costs;

NOW THEREFORE BE IT RESOLVED THAT the Sustainability and Climate Change Advisory Committee recommends to the Cobourg Municipal Council that Cobourg Council ask staff to seek the following improvements in the proposed sub-division plan/design toward a more sustainable development:

- achieve ‘passive house low-energy designation’ (not passive house certification) for all buildings;
- all buildings be made ‘photovoltaic solar ready’³ now for solar installation in the future. The solar readiness should enable the maximum amount of roof area to be covered by solar to the upper limit of the building being ‘net zero energy’⁴ i.e. maximize the use of solar. This will minimize solar installation costs and maximize solar system performance in the future. Although the appropriate solar energy

¹ International Energy Agency, Energy Efficiency Report 2018: Buildings; <https://www.iea.org/topics/energyefficiency/buildings/>

² David R. Boyd, the UN’s Special Rapporteur on human rights and the environment and a professor at the University of British Columbia in his address on the 70th Anniversary of the Universal Declaration and the Contemporary Human Rights Emergency of Climate Change. <https://www.universal-rights.org/blog/the-70th-anniversary-of-the-universal-declaration-and-the-contemporary-human-rights-emergency-of-climate-change/>

³ See Solar Ready Buildings Planning Guide, <https://www.nrel.gov/docs/fy10osti/46078.pdf>

⁴ The building produces enough renewable energy to meet its own annual site energy consumption requirements. For discussion on ‘zero energy buildings’ definitions see https://www.energy.gov/sites/prod/files/2015/09/f26/bto_common_definition_zero_energy_buildings_093015.pdf

DRAFT RESPONSE TO COBOURG COUNCIL FOR REVIEW BY THE SUSTAINABILITY AND CLIMATE CHANGE ADVISORY COMMITTEE ON JULY 17, 2019

consultant should be retained to ensure this is done properly, this would require among other things that:

- the site layout and building design reflects the appropriate location, orientation, and minimization of shading to maximize the production of solar photovoltaic energy;
 - each building has the structural capacity to support solar either flush mounted on sloped roofs, or ballasted on flat roofs; with appropriate roof types for the different roof designs e.g. standing seam metal roofs for sloped roofs;
 - there is the capacity in the electrical service/switchgear to accept solar
- wherever possible build 'green streets' - a stormwater management approach that incorporates vegetation (perennials, shrubs, trees), into depressed areas between sidewalk and streets, and uses engineered systems (e.g., permeable pavements), to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks).⁵
 - maximize the number of new trees on the site while ensuring no shading of future solar. This could be trees in the storm water pond area, and in the park. This would help to mitigate effects of climate warming by providing shade and by soaking up CO2 already in the air;
 - design the park including the location of trees to enable a community garden to be built for the use of the residents in East Village 5 to facilitate greater reliance on local food rather than food requiring energy to produce and transport

FURTHER THAT in the absence of an Official Plan that would enable the Town Cobourg to enforce this, Staff be asked to report back to Council on possible means in which the applicant can be encouraged to make these improvements to its present subdivision design including research into:

- how the City of Guelph is able to enforce a zero energy subdivision development⁶
- why local builders in Guelph are offering zero energy homes⁷;
- what other municipalities in Ontario are doing to facilitate zero energy building development

FURTHER THAT should there be no means to encourage the applicant to make the suggested improvements, Cobourg Council not approve the application taking the position that based on the October 2018 report from the IPPC about the Climate Crisis,

⁵ Green streets are designed to capture rainwater at its source, where rain falls. They can reduce energy use/costs through street lights that use efficient bulbs and ballasts and be powered by an alternative energy source.

<https://www.epa.gov/G3/learn-about-green-streets>;

⁶ https://www.guelphtoday.com/local-news/city-councillor-wont-support-any-new-development-that-isnt-net-zero-carbon-1499847?utm_source=Email_Share&utm_medium=Email_Share&utm_campaign=Email_Share;

⁷ Our Energy Guelph Community Energy Initiative (CEI) Update, Part 2, report to the City of Guelph Committee of the Whole; https://guelph.ca/wp-content/uploads/cow_agenda_050619.pdf#page=74

DRAFT RESPONSE TO COBOURG COUNCIL FOR REVIEW BY THE SUSTAINABILITY AND CLIMATE CHANGE ADVISORY COMMITTEE ON JULY 17, 2019

to approve this application would be counter to Part 1, Section 2 'Provincial Interest' of the Planning Act where "*a municipality...., in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as:*

- *the protection of the financial and economic well-being of the Province and its municipalities*
- *the promotion of development that is designed to be sustainable.....*
- *the mitigation of greenhouse gas emissions and adaptation to a changing climate; and*

FURTHER THAT Cobourg Council be prepared for this matter to be taken to the Ontario Municipal Board, with the Town of Cobourg defending their stance based on the Planning Act as discussed above, with support from Climate experts to inform how a worsening climate will negatively affect the financial and economic well being of the province, and that, as the UN Special Rapporteur on Human Rights and the Environment states "*.... climate change is causing grave human rights violations around the world, and threatening far worse violations in the foreseeable future*", and

FURTHER THAT Cobourg Council ask Staff to prepare a by-law to amend the Official Plan to address the need for new development to be sustainable as a step toward the mitigation of greenhouse gas emissions and adaptation to a changing climate, and that Cobourg Council ensure that staff have adequate tools and resources to successfully implement these requirements.