

Attachment-12 Community Energy Initiative Commitment



August 26, 2022

Lindsay Sulatycki
Senior Development Planner
Planning and Building Services
Infrastructure, Development and Enterprise
City of Guelph

Re: South Guelph Secondary School – Proposed Energy Initiatives

Dear Lindsay,

Traditionally, energy upgrades have been included as part of all new school design and construction at the Upper Grand District School Board. It is our hope that many of the initiatives listed below are included in future projects such as the new South Guelph Secondary School subject to budgetary, technological and supply chain restrictions.

- 1) Building Exterior
 - Roof structure to be designed for future solar array expansion
 - Standard white mod bit roofing membrane to be installed to reduce cooling loads, and reduce the urban heat island effect
- 2) Site
 - Exterior lighting fixtures to be dark sky compliant and LED to ensure maximum efficiency
 - Trees to be of native varieties with consideration for those which are heat and drought tolerant
- 3) Water Efficiency
 - Low volume flush toilets are to be used where possible
 - An automated urinal flush system is to be included
 - Water bottle filling stations are to be provided
 - Drought resistant soft landscape materials are to be specified to avoid the need for irrigation
 - Rainwater collection will be considered



4) Energy Efficiency

- Energy recovery ventilators are to be included as part of the HVAC design
- Low E window film is to be added to reduce heat gain and losses
- High efficiency condensing domestic hot water heaters are to be used
- High efficiency condensing boilers are to be included as part of the hydronic heating system design
- Interior and exterior lighting will be LED
- Occupancy sensors for lighting control to be provided in all classrooms, hallways, and occupied spaces
- Full building automation system to be included to control heating and ventilation sequences
- Solar preheat systems will be considered
- Air and ground source heat-pumps will be considered as an alternate to standard natural gas heating.

5) Renewable Energy

- All renewable technologies such as Wind Turbines, Geothermal, Solar Photovoltaic and Biomass technologies will be considered

6) Materials & Resources

- Where possible, materials would be sourced locally to limit the environmental impact of transportation.

Yours truly,

Dparmar

Dilip Parmar
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