# PCA Permit Application

## Lonsdale Energy Standard Information

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1. The proposed development is subject to connection to the Community Energy System in accordance with the Hydronic Energy Service Bylaw (Bylaw No. 7575).

2. All building services heating applications shall be connected to and employ an in-building hydronic heating system served by the Community Energy System, including but not limited to: space heating, ventilation heating, and domestic hot water heating. Other heating energy sources including electricity and natural gas are not permitted and shall not be used for building services applications. This also applies to any commercial spaces on the property. Please contact info@LonsdaleEnergy.ca if there are further questions about the Community Energy System or Lonsdale Energy requirements.

3. The developer shall review Bylaw No. 7575.

4. Refer to Bylaw 7575 for fees and charges related to the Community Energy System and Lonsdale Energy. Also refer to https://www.cnv.org/city-services/lonsdale-energy/about-lec-rates for information on rates and rate structure. Lonsdale Energy strongly recommends that the applicant consider ways to reduce the nominated thermal capacity and thus the associated fees and charges.

5. Refer to Bylaw 7575 for requirements of sub-metering and allocation of hydronic energy fees.

6. The Community Energy Agreement covenant shall be executed prior to Lonsdale Energy signoff on the planning permit application.

7. Civil, mechanical, architectural and landscape site plans shall show the proposed Lonsdale Energy service connection and other utility service connections into the property/building. Civil drawings shall include dimensions from the property line and the proposed invert elevations (0.9m cover typical) for information and coordination. Civil plans shall also show Lonsdale Energy DPS mains for coordination purposes.

8. The Lonsdale Energy service connection into the development shall not be obstructed by permanent objects for reasons of access, construction, inspection, maintenance, and repair. For example: soil cells, trees, large plants, structural elements, stairs, permanent planters, streetlighting and lamp bases, stormwater infiltration facilities, or other utilities shall not be located above or near the Lonsdale Energy service connection or DPS mains. The minimum horizontal clearance from Lonsdale Energy piping to adjacent buried utilities is 1.5m. The minimum vertical clearance for utilities crossings is 0.3m.

9. A dedicated mechanical space for Lonsdale Energy's Energy Transfer Station (ETS) shall be provided. This space should be located directly where the Lonsdale Energy service connection enters the building, on the highest below grade level. A

dedicated ETS room with an out-swinging lockable double door is recommended. If necessary, the space may be located within a building mechanical room with lockable fenced space and a double door wide out-swinging gate provided by the Owner. Access from outside to ETS space to match double door width access.

10. The ETS is provided, owned, and maintained by Lonsdale Energy. An estimated minimum space of 3m x 2.5m x 2.75m high is required (to be confirmed by Lonsdale Energy following the mechanical consultant's total heating load estimate). ETS space shall have double door access or equivalent.

11. Lonsdale Energy strongly suggests locating any centralized in-building mechanical heating equipment (particularly domestic hot water production equipment) directly adjacent to the ETS space to avoid potential temperature performance issues.

12. Architectural plans shall clearly indicate the location of the LEC space for the development permit application.

13. Mechanical plans shall show the proposed and coordinated routing of the interior DPS to the ETS area.

14. Any requested DPS extensions, alternative service connection locations, and alternative ETS locations are subject to Lonsdale Energy review. If deemed feasible by Lonsdale Energy, Lonsdale Energy will recover all associated costs from the Owner at cost plus.

15. Building mechanical rooms shall be adequately sized to accommodate the necessary equipment to adequately serve the building and to operate in compliance with Lonsdale Energy performance requirements, particularly that of maximum heating return water temperature. Consider space for Lonsdale Energy ETS, and clearance space for all equipment maintenance and replacement.

16. The applicant shall notify Lonsdale Energy of the estimated date of heating service and the estimated heating load. A minimum of 18 months' advance notice is required to plan and construct the Lonsdale Energy service connection. Please email info@LonsdaleEnergy.ca.

17. For domestic hot water (DHW) heating, consider using instantaneous DHW heat exchanger stations, one per unit (aka "heat interface units"). This can eliminate DHW and DHW recirculation distribution piping and associated centralized equipment and help to ensure low heating return water temperature to comply with Lonsdale Energy return water temperature performance requirements. It may also

help to reduce ongoing energy usage associated with DHW recirculation heating and standby heat losses.