

December 8, 2021

City of Surrey District Energy: Information for Building Developers

Purpose:

The purpose of this Information Bulletin is to provide supplementary information to Building Developers regarding the requirements of new projects connecting to the City’s District Energy Utility – Surrey City Energy (SCE). The information provided here should be consulted in addition to the City’s [District Energy System By-Law](#) (the “By-Law”) and direction provided by Land Development or Planning.

Requirements for your Development Project:

Surrey’s DES By-Law establishes City Centre as a District Energy (DE) service area. The DE service area is divided into two areas: Service Area A and Service Area B (illustrated in this [map](#)). The following table explains the level of DE compatibility that is required of your development project.

Service Area	Floor Area Ratio (FAR)	DE Compatibility	DE Connection
Service Area A	Equal to or Greater than 1.0	Full	DE-Connected
Service Area B	Equal to or Greater than 2.5	Full	DE-Ready
Service Area B	Between 1.0 and 2.5	Partial	DE-Ready

Refer to the Bylaw for specific requirements for your building’s hydronic systems with respect to DE Compatibility and DE Connection.

The following details are applicable to both Service A and Service B developments:

Expectations for Detailed Submission at Servicing Agreement Stages:

The drawing package submitted to Land Development during the project detailing and project review stage shall show an alignment for District Energy (DE) piping.

- A preliminary district energy alignment can be represented by a 1.5 m wide trench along the length of road fronting the development property. This will represent the space required for the two parallel district energy pipes (supply and return). There should be a minimum 1.5 m horizontal separation from the center lines of the district energy pipes to other utilities.

- A lateral service connection should be shown from the 1.5m trench into the building below grade parkade level at the DE room location. The service connection can be represented by a 1.0m wide trench.
- Profile cross sections of the road at the service connection should be provided in order to show location of adjacent utilities.
- A 6 m Section 219 Covenant Area (see next section)

City staff will be able to provide any further project specific direction with respect to the DE room location and dimensions.

Registration of Statutory Right of Way and Section 219 Covenant:

In order to connect to the District Energy utility, the owner of the property being developed must agree to grant the City a blanket Statutory Right of Way and Covenant. These are necessary for the construction, operation and maintenance of the City's DE equipment.

A second Section 219 Covenant must also be granted, which limits the type of activity which can occur on the lands directly above the DE service connection. This plan requires a certified survey plan be submitted, which shows the area included in the Covenant. This area should extend from the property line to the exterior wall of the parkade and be 6m wide centered above the service connection.

Summary of the requirements:

- Certified Survey Plan showing extent of Section 219 Covenant
- Current title search

The Certified Plan is for the purpose of the Covenant; the title block should not reference a statutory right of way (SROW).

The registration of SROW and Covenant at the Land Title Office will be completed by the City and this shall be completed prior to issuance of Building Permit. City staff will support this process, in particular the confirmation of the Service Connection alignment. Contact the City to see an example of a Survey Plan with the Section 219 Covenant and an example agreement for the for the SROW and Covenant.

The following details are applicable to Service Area A (mandatory District Energy connections) and voluntary service connections in Service Area B:

Application for Service and Timing for District Energy Service:

An [Application for District Energy Service](#) must be submitted to the City at the time of the Building Permit application. This form includes energy usage estimates and service date information. The owner should provide the best estimate of the anticipated building occupancy date to inform the City on the timing of the DE infrastructure installation.

The Connection Date is a maximum of three months in advance of the building occupancy date. Contact the City to discuss earlier service options if the building requires heat more than three months before building occupancy. Notwithstanding the Connection Date, the

developer will be billed the Charge (metered consumption charge) for all energy metered from the time that the district service is provided to the development. The developer will be billed the Levy (daily demand charge) as of the Occupancy Date.

To avoid incurring district energy costs if the development is behind schedule, developers may submit a written request to amend to the Application for Service, **no less than one year** in advance of the earlier of the initial building occupancy date or the proposed revised building occupancy date.

Connection Cost:

The City's District Energy System By-Law requires a Connection Cost be paid prior to issuance of a Building Permit. The connection cost is calculated using a specified \$/kilowatt of peak heat energy demand as submitted in the Application for DE service and the charge is specified in Schedule E of the By-Law. Further information related to the connection cost is available in Schedule E of the By-Law.

Building Permit Submission Review:

Building Permit Submissions for projects connecting to the District Energy utility shall include a 5th set of building permit drawings to be reviewed by SCE staff for compliance with the By-Law.

Disclosure Statements:

The City requires that all developers of projects that will be connecting to the District Energy utility demonstrate that the disclosure statements filed for their project will accurately reflect the costs of heating. This information must be submitted to SCE prior to issuance of a Development Permit. For the purpose of estimating future years' rates, it is reasonable to assume an annual rate escalation equal to the cost of CPI inflation (approx. 2.1%).

Sample Heating Cost Calculation:

Table 1 – Assumptions

A	Estimated Floor Area (m ²)	15,800
B	Energy Use Intensity (kWh/m ² /yr)	105
C = A*B/1,000	Projected Annual Heat Consumption (MWh)	1,659

Table 2 – 2021 District Energy Rates (City of Surrey Bylaw 17667)

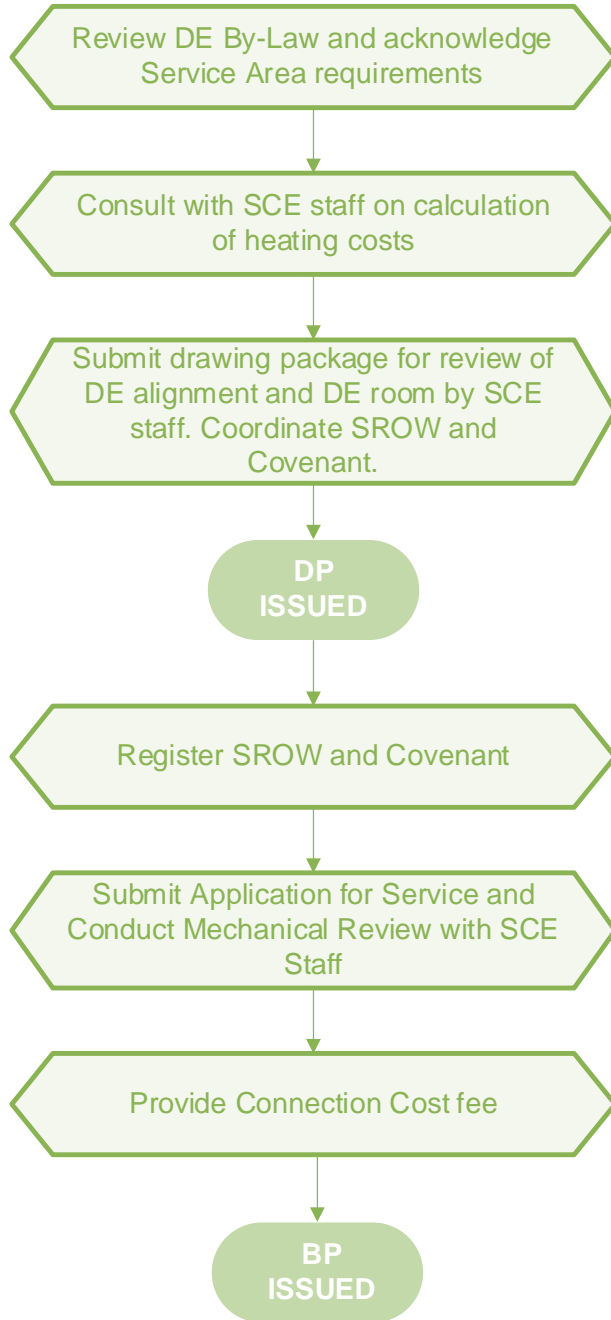
D	Class 1 Levy (\$/m ² /day)	\$0.01873
E	Class 2 Levy (\$/kW/day)	\$0.2683
F	Charge (\$/MWh)	\$55.30

Table 3 – Estimated Annual Heating Costs

G = C*F	Charge (\$/year)	\$91,743
H = A*D*365	Levy (\$/year)	\$108,016
I = G+H	Total Annual Cost	\$199,759

Timeline of District Energy Related Deliverables:

Service A and Voluntary Service B DE Connections:



Service B Developments:

