



STREETLIGHTING INSTALLATION FAQ

Neighbourhood Renewal



Why do we need streetlights?

- To provide an adequate visual environment for users to safely travel on the road during non-daylight hours.
- To improve visibility by reducing the glare impacts of approaching vehicle headlights.
- To reveal objects and markings on the roadway beyond the range of vehicle headlights.
- To offer a cost-effective means of increasing public safety.

How do streetlights turn on/off?

Circuits are turned on and off automatically by a photocell that senses ambient light levels. It is set to turn on at dusk and off at dawn.

Are new streetlight poles galvanized?

Yes. All poles, including decorative poles, are hot-dipped galvanized to CSA G-164 standard. They have a projected life expectancy of 75 years.

To what standards are the streetlights designed?

All new or rehabilitated streetlights are designed to the City's Road and Walkway Lighting Design Standards, which are based on technical guidelines, industry best practices and applicable policies such as the Transportation Association of Canada.

How are streetlight pole locations selected?

For full system rebuilds, new poles and fixtures replace streetlights that generally were not installed to any national design guideline or standard at the time of installation. Poles may be relocated to ensure:

- Design light levels are met;
- There is little to no impact on trees;
- Legal and safe clearance from utilities are maintained;
- Adequate clearance from accesses (i.e. alleys, driveways) are met;
- The least amount of impact on residents.

In some cases it is necessary to have a pole in front of a property, but only if this is the only feasible location.

What is the priority sequence for choosing pole locations?

During the design and construction stages, the priority sequence is to:

1. Light the roadway to provide a safe and functional system;
2. Ensure legal and safe clearances from existing utilities, trees and tree canopies;
3. Minimize capital costs and ongoing maintenance costs;
4. Minimize environmental impact.



Are the streetlight poles installed on my property?

No. Every streetlight in a neighbourhood reconstruction is installed entirely on city road right-of-way. Pole locations are initially designed to be at projected property lines between houses, and still meet recommended light levels. All pole locations are field checked prior to installation by the City's Street Lighting Section, the electrical services contractor and forestry. The field inspections determine if there are utilities, trees, landscaping obstructions or accesses that may conflict with the initial design. Streetlight poles may need to be moved away from the projected property lines between houses or to the opposite side of the road.

Is the City replacing high-pressure sodium (HPS) fixtures with light emitting diode (LED) fixtures?

Yes. Over the past five years, the City has researched LED products and conducted pilot projects to determine if LED is a viable option for roadway lighting. Beginning in 2011, LED luminaires will be used on neighbourhood roadways.

Benefits include:

- Power consumption savings. Net power savings for entire neighbourhood renewals can be 40%-60%, depending on the application. This may take into account road classification, width and spacing.
- Long-lasting fixtures. LED fixtures last 15-20 years: approximately four times longer than HPS fixtures. This reduces maintenance costs. The City also insists that all LED manufacturers provide a 10-year warranty.
- Dark skies friendly. All LED fixtures are flat lens, full cut-off with zero per cent uplight.
- Reducing CO2 emissions. LED fixtures reduce greenhouse gas emissions.
- Minimizes light trespass. LEDs are more directional than HPS, so light is better designed to light the roadway, not private property, and therefore further minimize light trespass onto private property.

Is decorative streetlighting an option for older neighbourhoods?

Yes. The City offers decorative streetlight options as part of the Neighbourhood Renewal Local Improvement program. Unlike current standard galvanized streetlights, decorative streetlights offer a variety of options for colour, pole styles and arm types. Decorative pole options are standardized to better manage costs associated with inventory control, maintenance and replacement. There is no difference between the power consumption of a standard streetlight pole and that of a decorative pole.

To initiate the Decorative Streetlight Local Improvement, a neighbourhood scheduled for renewal can submit for an expression of interest (EOI), which requires approval from over 50 per cent of area property owners to proceed. If property owners support the local improvement (where a simple majority does not petition against the project during the 30-day petition protest period) and City Council passes the Local Improvement, property owners will then pay 100% of the total cost above what the amount for standard galvanized streetlights. The cost varies depending on the streetlight selected and the number of property owners sharing the expense.



FOR MORE INFORMATION

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