Appropriate nighttime lighting a key component of pedestrian safety.

Penhold, Alberta



Location Penhold, Alberta

Client Town of Penhold

Background

The town of Penhold in rural central Alberta, Canada is growing. Over the past five years, the population has increased by 22.4%, driven by a strong economy and infrastructure aimed at attracting young families.

Among them is the Penhold Regional Multiplex. Since opening its doors on Wasakoo Avenue in 2010, the nearly 100,000-square-foot venue has become a cornerstone of the community, drawing hundreds of daily visitors to its hockey rink, running track, fitness center, library, and cafe.

Project Requirements

The T-intersection at Wasakoo Ave. and Hawkridge Blvd. was identified in a 2016 report to council that looked at ways to improve pedestrian safety throughout the town. It is located just 200m south of Highway 142, which itself received a new crosswalk with overhead signage and beacons in 2017.

Like many roads in the area, Wasakoo Ave. is flat, straight, and prone to speeding. Drivers regularly exceed the posted limit of 40 km/h, putting pedestrians walking along the road at risk (only recently was a sidewalk installed along Wasakoo in front of the multiplex).

Compounding the issue is a lack of appropriate nighttime lighting, which Transport Canada recognizes as a key component of pedestrian safety. Although both Wasakoo and Hawkridge have street lights, none are located at the crosswalk, and none provide the right type or amount of light to sufficiently illuminate pedestrians.

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Solution

Carmanah worked with our Alberta distributor ATSTraffic to deliver Penhold a safe and sustainable crosswalk system that combines our best-selling rectangular rapid-flashing beacons (RRFBs) with our new purpose-built overhead crosswalk lights.

Beginning with two SC315-G RRFBs, we added a Type 4ME cobra head luminaire, which has been shown to provide uniform, directional lighting without hazardous glare or inefficient "spilled light." When activated by a pedestrian, both the overhead lights and the RRFB light bar

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– Sustainability confirmed with Carmanah's Solar Power Report

switch on, working together to capture drivers' attention and compel them to yield.

Even though Penhold sits at a latitude of 52° N and sees as little as 7.5 hours of daylight in winter, the system is able to run entirely on solar power thanks to efficient components and proper energy management. This means the town was able to save not only on installation costs, but on operational costs as well—a benefit they've already seen from the solar panels powering the multiplex itself.

Outcome

Penhold's new enhanced crosswalk supports the town's growth and its reputation as a livable and active community. In addition to creating a safe and well-lit place for people to cross, it will encourage more of them to use designated crosswalks, and increase the awareness of pedestrians on the roadway in general.



