



THE CORPORATION OF THE CITY OF VERNON

**MEMORANDUM**

**TO:** Patti Bridal, Chief Administrative Officer **FILE:** 8400-02  
**PC:** James Rice, Director, Operation Services **DATE:** November 2, 2023  
Debra Law, Director, Financial Services  
**FROM:** Ian Adkins, Manager, Roads, Drainage and Airport  
**SUBJECT: AIRPORT RUNWAY AND TAXIWAY LIGHTING LED UPGRADE**

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The purpose of this memorandum is to request Councils authorization to reallocate a portion of the remaining funding from the Apron Rehabilitation and Expansion project to fund the conversion of airfield lighting to LED technology.

The airfield lighting at the Vernon Airport was originally installed in 1998. Since that time, consistent maintenance and improvements have ensured the safe movement of aircraft during hours of low light and darkness, in compliance with Transport Canada regulatory standards. Over the past 10 years, many lighting components at the Airport have been upgraded to lower cost and lower maintenance LED lighting alternatives. This includes the successful LED conversion of three hazard beacons with power supplied by solar and battery, two windsocks, and most recently, eight apron floodlights.

The largest remaining airfield lighting system using incandescent and halogen bulbs consists of approximately 134 lighting fixtures located along the runway and taxiway edges. These bulbs must be replaced, at minimum, annually at a cost of approximately \$3500. For comparison, LED runway/taxiway fixtures have a life expectancy of 15 years resulting in a significant cost saving in annual maintenance.

The estimated cost to upgrade the Airport runway and taxiway edge lighting to LED is \$100,000. This would also include the cost to upgrade the aircraft radio-controlled aerodrome lighting (ARCAL) system. The ARCAL is a radio device that is used by pilots to remotely turn the airfield lights on when required (during approach or departure). The system is 25 years old and is due for replacement. The estimated savings of electricity and maintenance costs associated with this project is \$5,500/year.

In 2021, the Apron Rehabilitation and Expansion project was approved by Council with a budget of \$1,029,699 funded from the Casino Reserve. The project was completed in May of 2023, \$307,000 under budget. Administration is recommending that Council consider using \$100,000 of the remaining funds from the Apron Rehabilitation project to fund the Airport Runway and Taxiway Lighting LED upgrade project.

**RECOMMENDATION:**

THAT Council receive the memorandum titled "Airport Runway Lighting LED Upgrade" dated November 2, 2023, respectfully submitted by the Manager, Roads Drainage and Airport;

AND FURTHER, that Council authorize administration to proceed with the "Airport Runway Lighting LED Upgrade" at a cost not to exceed \$100,000, to be funded by reallocating unspent funding from the Apron Rehabilitation Project, which was approved from the Casino Reserve.

Respectfully submitted:

**Ian Adkins**

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Ian Adkins, Manager, Roads, Drainage  
and Airport.

Approved for the Agenda by the CAO 