Memo

To: Mayor Kogon and Members of Amherst Town Council

From: Jason MacDonald, Deputy CAO

Date: June 24, 2019

Re: Community Credit Union Business Innovation Center Roof Additional Information

At the June 17, 2019 Committee of the Whole an amendment to the capital budget for the replacement of the roof at the Community Credit Union Business Innovation Center was forwarded to the June 24, 2019 Council meeting for consideration. Staff were also directed to provide additional logistical information on the installation of both a 'green roof' and a 'pitched roof'.

Pitched Roof

- The installation of a pitched roof would necessitate procurement of consultant services to design the new roof structure.
- The existing roof accommodates mechanical equipment for the building's HVAC system. This equipment would have to either be moved to another location or somehow mounted on the new pitched roof. This would necessitate design changes to the HVAC system for which staff do not currently have budget estimates.
- Depending on the orientation of the pitch on the new roof, the windows on the east side of the second floor of the building would either have to be removed or would look out onto the side of the pitched roof.

Green Roof

- An internet-based roofing calculator indicates that a green roof is approximately 2.5 more expensive to install than a flat roof.
- Prior to procurement, a structural assessment of the building would be required to
 ensure it could accommodate the additional weight of the plants and water
 associated with the green roof.
- The green roof infrastructure, including plants, piping, drainage and water retention systems would have to be designed by a professional prior to procurement.
- A door would be required on the east side of the second floor of the building to provide access to the roof. This can likely be accommodated by conversion of one of the existing windows.
- Railings and possibly an additional emergency exit may be required for the roof.
- There would be a slight increase in operational costs for the maintenance of plants on the roof.

The building was originally constructed in 1967 with the roof being replaced in the early 1990's. This gives the life span of both the original and replacement roof of approximately 25 years which is the expected lifespan of this type of roof. Given this information staff feel that a flat roof is functioning as expected and this replacement is part of the normal asset management process.

The installation of a flat roof at this time does not necessarily remove the possibility of conversion to a green roof at a later date.

Summary

Due to the presence of the HVAC equipment and the impact on the existing windows on the second floor of the building the installation of a pitched roof may not be practical.

A green roof would likely be significantly more expensive than a traditional flat roof. In addition, the lead time required for a structural assessment and green roof design would jeopardize the installation of any roof this construction season which negates the purpose of advancing the roof replacement in the ten-year capital plan.

Staff recommend that the existing flat roof on the Community Credit Union Business Innovation Center be replaced with a traditional flat roof as per the existing plan.