

**TOWN OF LUMSDEN  
BYLAW NO. 03-2018**

A Bylaw to amend Bylaw No. 14-2002 known as the Official Community Plan.

The Council of the Town of Lumsden, in the Province of Saskatchewan, enacts to amend Bylaw No. 14-2002 as follows:

1. **PART 10.0 SLOPE STABILITY**, is deleted in its entirety and replaced with the following new Part:

**“10.0 SLOPE STABILITY**

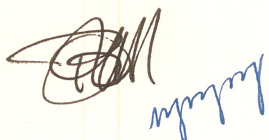
**10.1 Slope Stability Considerations**

The valley walls within and adjacent to Lumsden are known to adjust their form over time through surface erosion, soil creep, and slope failure (or slumping). The amount and type of change varies, depending on the specific conditions at any given location. In general, where surface runoff converges in ravines and ditches, there is little erosion as long as vegetation cover or erosion protection measures are taken. Erosion is visible, well understood, and readily addressed in most situations. Soil creep is the slow, down- slope movement of near surface soils mainly due to frost action and soil saturation in the winter freeze-up and spring thaw times. Such movement is slow and persistent, and generally only affects smaller, shallow structures on very steep sites. Soil creep has not been a significant development or land use issue since the very steep slopes typically have not been developed. Slumping is the failure of a valley slope to hold itself in place. Often triggered by either increased groundwater levels (seasonally and over extended periods of time), additional loading on the slope, or by excavation or erosion at the base of the slope, slumping can affect foundations, roadways, underground utilities, and other built features with potential for significant damage and cost.

Slumping has been addressed by municipal land use policy for many years. The growth of Lumsden in the past thirty years has been mainly on the valley slopes where evidence of past slumping is readily found, and where some existing developments have had problems with foundation performance in the presence of active slumps. Due to the potential for significant damage, Council recognized the need for definitive policies related to this potential hazard, and to diligently enforce the need for thorough engineering investigations and implementation of the recommendations of qualified geotechnical engineers specializing in slope stability investigations and solutions.

The potential for erosion and slope failure can be assessed with reasonable certainty, and managed to some degree, by engineering works, however, ongoing activities on slope areas and even on upland areas and nearby valley floor sites can detrimentally affect slope stability. Such slope destabilization results in significant residual risk regardless of engineered precautions and the need for land use controls and monitoring that are beyond the traditional scope, and reasonable capabilities, of municipal approvals, agreements, and programs. Council, representing the interests of all residents, businesses, and landowners, should not unknowingly accept the risk of damages associated with a development that has not adequately addressed erosion and slope failure potential. The project proponent must have the financial resources to commit to an appropriate level of engineering investigation and also to assume the liability associated with such a development. The risks and potential liabilities must be weighed against the aesthetic and/or financial benefits of development in a valley slope or nearby location.

Engineering investigations and design work performed by qualified geotechnical engineers is intended to advise on the nature and level of risk. By undertaking this work, neither the responsibility for reasonable care, nor the potential liability associated with accepting risk, transfers to the professional engineer. The Town has a responsibility to consider reasonable levels of investigation, the engineer needs to be directed by the project proponent to provide information and technical analysis, risk identification, and design work and, to the extent possible under the law, the project proponent will accept the risks and liabilities if the project proceeds. The Town then has a responsibility to require compliance with recommended engineering measures and any other measures deemed appropriate. In the end, all parties have to be prepared to accept their part of the responsibility for residual risk.



## 10.2 Slope Stability Objectives

Even though erosion and slope failure potential can be assessed and engineering solutions can be determined and carried out, there will be residual and often uncertain hazard associated with development on and near valley slopes. In this context, the following objectives recognize and respond to slope failure potential:

1. To require that developers and property owners commission sufficient, professional engineering investigations to reasonably assess erosion and slope failure potential.
2. To avoid development and activities where the risk of unmitigated erosion or slope failure is unacceptable to Council.
3. To avoid development or uses where there is the potential to cause erosion or increase the potential for erosion or slope instability on the site or elsewhere.
4. To avoid or minimize potential impacts of slope instability on municipal services and infrastructure.
5. To recognize the need for all parties to make informed decisions, to acknowledge the limitations of science and engineering in responding to these hazards, and to accept residual hazards associated with potential slope failure.
6. To require that developers, project proponents, and future owners understand that they also share in and accept all residual risks and liabilities associated with development in and near the valley where slope instability hazard exists.

## 10.3 Slope Stability Policies

1. In conjunction with "Zoning Map 3 - Slope Instability Overlay Areas", from the *Town of Lumsden Zoning Bylaw No. 15/2002*, The Town will determine when, and for what properties, erosion and slope instability investigations are required as a basis for development approval.
2. Council will establish the minimum objectives of any required erosion and slope stability investigations to address the interests of the Town, and to require that the developer and/or property owner reasonably assess the hazards relative to the proposed development.
3. Erosion and slope stability investigations will be undertaken by qualified engineering professionals registered with the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) and authorized with Permission to Consult in Saskatchewan.
4. The Town of Lumsden, in addressing the hazards associated with erosion and slope instability shall at least undertake as follows:
  - Require investigations as part of an application for subdivision and/or development;
  - Establish the objectives of scientific and engineering investigations in relation to such applications;
  - Require that using current and future technical, administrative, and legal means, that the hazards and potential long-term costs associated with potential erosion and slope failure can, and will, be borne fairly by all parties including the proponent and/or the future owner; and
  - Require that in Servicing Agreements for a development, it is stated that future owners of subdivided parcels within a development are informed, acknowledge the inherent risks, undertake reasonable investigations, and accept liability for development undertaken on land where slope instability is a concern. Furthermore, a copy of the Servicing Agreement shall be made available when ownership of properties changes in a subdivision where slope instability

is a concern.

5. The types of development and uses allowed in the slope instability areas, and associated supplementary requirements and development standards, will be specified in the Zoning Bylaw.”

2. **PART 11.0 ENVIRONMENTAL PROTECTION, SECTION 11.3; ENVIRONMENTAL POLICIES, SUB-SECTION 10, BULLET 1**, is deleted in its entirety and replaced with the following new bullet:

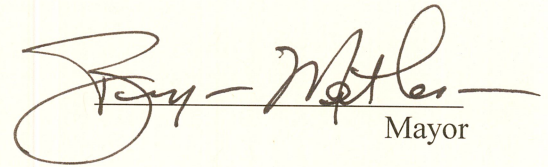
“ Where the development of a structure or landscaping is proposed in an environmentally sensitive area as identified on “Plan Map 4 - Environmentally Sensitive Areas Map” from *The Town of Lumsden Basic Planning Statement Bylaw No. 14/2002*, Council shall require the applicant to submit an environmental study. The applicant shall be responsible for the costs of the study which is to be undertaken by qualified professionals that are mutually agreed upon by Council and the applicant. The study shall provide recommendations to protect and conserve natural features and drainage courses, demonstrating to the satisfaction of Council that the proposed development is suitable and will not adversely affect environmentally sensitive land.”


3. This Bylaw shall come into force and take effect when approved by the Minister of Government Relations.

**Readings**

Read a first time this 27<sup>th</sup> day of February, 2018.  
Read a second time this 10<sup>th</sup> day of April, 2018.  
Read a third time this 10<sup>th</sup> day of April, 2018.



  
Mayor

  
Chief Administrative Officer

Certified to be a true copy of Bylaw No. 3-2018  
adopted by the Council of the Town of Lumsden  
on the 10<sup>th</sup> day of April, 2018

  
Chief Administrative Officer

