ORDINANCE 23-103 CITY OF COURTLAND NICOLLET COUNTY, MINNESOTA

An Ordinance Amending Part 3 of Chapter III of the City Code of the City of Courtland relative to zoning regulations

Subdivision 2. Permits and Applications: In the absence of a state stormwater construction permit and before proceeding with any building, construction, erection, structural alteration or land alteration of more than 50 cubic yards in the City, a zoning permit shall be obtained. Application therefore shall be in writing to the Zoning Administrator in such form and with such information as shall be required, including the use, nature, size, location and cost of the intended work. Applications shall also be made to the Zoning Administrator for any zoning amendments, conditional use permits or variances necessary in connection with desired zoning permits. The applications shall be accompanied by payment of the prescribed fee, which shall be set by resolution of the City Council. Zoning permits shall be submitted by the Zoning Administrator to the Planning Commission for informational purposes.

303.13 Subdivision 8. Land Preservation

GENERAL STANDARDS

- 1. All development shall conform to the natural limitations presented by the topography and soil as to create the best potential for preventing soil erosion.
- 2. Slopes over twelve (12) percent in grade shall not be developed.
- 3. Development on slopes with a grade between eight (8) percent and twelve (12) percent shall be carefully reviewed to ensure adequate measures have been taken to prevent erosion, sedimentation, and structural damage.
- 4. Erosion and siltation control measures shall be coordinated with the different stages of development. Appropriate control measures shall be installed prior to development when necessary to control erosion.
- 5. Land shall be developed in increments of workable size such that adequate erosion and siltation controls can be provided as construction progresses. The smallest practical area of land shall be exposed at any one period of time.
- 6. The drainage system shall be constructed and operational as quickly as possible during the construction.

- 7. Whenever possible, natural vegetation shall be retained and protected.
- 8. Where the topsoil is removed, sufficient arable soil shall be set aside for re-spreading over the developed area. The soil shall be restored to a depth of four (4) inches and shall be of a quality at least equal to the soil quality prior to development.
- 9. When soil is exposed, the exposure shall be for the shortest feasible period of time. No exposure shall be planned to exceed sixty (60) days. Said time period may be extended only if the Planning Commission is satisfied that adequate measures have been established and will remain in place.
- 10. The natural drainage system shall be used as far as is feasible for storage and flow of runoff. Storm water drainage shall be discharged to marshlands, swamps, retention basins, or other treatment facilities. Diversion of storm water to marshlands or swamps shall be considered for existing or planned surface drainage. Marshlands and swamps used for storm water shall provide for natural or artificial water level control. Temporary storage areas or retention basins scattered throughout developed areas shall be encouraged to reduce peak flow, erosion damage, and construction cost.

Subdivision 9. Exposed Slopes

The following control measures shall be taken to control erosion during construction:

- 11. No exposed slope should be steeper in grade than three (3) feet horizontal to one (1) foot vertical.
- 12. Exposed slopes steeper in grade than ten (10) feet horizontal to one (1) foot vertical should be contour plowed to minimize direct runoff of water.
- 13. At the foot of each exposed slope, a channel and berm should be constructed to control runoff. The channelized water should be diverted to a sedimentation basin (debris basin, silt basin, or silt trap) before being allowed to enter the natural drainage system.
- 14. Along the top of each exposed slope, a berm should be constructed to prevent runoff from flowing over the edge of the slope. Where runoff collecting behind said berm cannot be diverted elsewhere and shall be directed down the slope, appropriate measures shall be taken to prevent erosion. Such measures should consist of either an asphalt paved flow apron and drop chute laid down the slope or a flexible slope drain. At the base of the slope drain or flow apron, a gravel energy dissipater should be installed to prevent erosion at the discharge end.
- 15. Exposed slopes shall be protected by whatever means will effectively prevent erosion considering the degree of slope, soils material, and expected length of exposure. Slope protection shall consist of mulch, sheets of plastic, burlap or jute netting, sod blanket, erosion mat, fast growing grasses, or temporary seeding of annual grasses. Mulch consists of hay, straw, wood chips, corn stalks, bark, or other protective material. Mulch should be anchored to slopes with liquid asphalt, stakes, and netting, or should be worked into the soil to provide slope stability.

16. Control measures, other than those specifically stated above, may be used in place of the above measures if it can be demonstrated that they will as effectively protect exposed slopes.

Subdivision 10. Preservation of Natural Drainageways

- 17. Waterways
 - A. The use of storm sewers are not an acceptable alternative to the use of the natural above ground drainage system to dispose of runoff. Storm sewers may only be used where it can be demonstrated that the use of the above ground natural drainage system will inadequately dispose of runoff. Above ground runoff disposal waterways may be coordinated with an open space trail system. The trail system shall be confined to the edges and not the bottom of the waterway.
 - B. The widths of a constructed waterway shall be sufficiently large enough to adequately channel runoff from a ten (10) year storm. Adequacy shall be determined by the expected runoff when full development of the drainage area is reached.
 - C. No fences or structures shall be constructed across the waterway that will reduce or restrict the flow of water.
 - D. The banks of the waterway shall be protected with permanent turf vegetation.
 - E. The banks of the waterway should not exceed five (5) feet horizontal to one (1) foot vertical in gradient.
 - F. The gradient of the waterway bed should not exceed a grade that will result in a velocity that will cause erosion to the banks of the waterway.
 - G. The bed of the waterway should be protected with turf, sod, or concrete. If turf or sod will not function properly, rip rap may be used. Rip rap shall consist of quarried limestone, fieldstone (if random rip rap is used), or construction materials, which are limited to asphalt, cement and concrete. The rip rap shall be no smaller than two (2) inches square or no larger than two (2) feet square. Construction materials shall be used only in those areas where the waterway is not used as part of a recreation trail system.
 - H. If the flow velocity in the waterway is such that erosion of the turf sidewall will occur and said velocity cannot be decreased via velocity control structures, then other materials may replace turf on the sidewalls. Either gravel or rip rap would be allowed to prevent erosion at those points.
- 18. Waterway Velocity
 - A. The flow velocity of runoff in waterways shall be controlled to a velocity that

will not cause erosion of the waterway.

- B. Flow velocity should be controlled through the installation of diversions, berms, slope drains, and other similarly effective velocity control structures.
- 19. Sediment Control
 - A. To prevent sedimentation of waterways, pervious and impervious sediment traps and other sediment control structures shall be incorporated throughout the contributing watershed.
 - B. Temporary pervious sediment traps shall consist of a construction of bales of hay with a low spillway embankment section of sand and gravel or specifically designed fabric fences that permit a slow movement of water while filtering sediment. Such structures would serve as temporary sediment control features during the construction state of development. Development of housing and other structures shall be restricted from the area on either side of the waterway required to channel a twenty-five (25) year storm.
 - C. Permanent impervious sediment control structures consist of sediment basins (debris basins, de-silting basins, or silt traps) and shall be utilized to remove sediment from runoff prior to its disposal in any permanent body of water.
- 20. Maintenance of Erosion Control Systems
 - A. The erosion and velocity control structures shall be maintained in a condition that will ensure continuous functioning according to the previsions of this Ordinance.
 - B. Sediment basins shall be maintained as the need occurs to ensure continuous de-silting action.
 - C. The areas utilized for runoff waterways and sediment basins shall not be allowed to exist in an unsightly condition. The banks of the sediment basins and waterways shall be landscaped.
 - D. Prior to the approval of any plat for development, the developer shall make provisions for continued maintenance on the erosion and sediment control system.

This Ordinance shall be in full force and take effect from and after its passage, approval and publication.

Passed by the City Council of the City of Courtland, Minnesota on the 6th day of July 2023

Attest: Julie Iolm. City Clerk Acting Mayor