

ORDINANCE NO. 280 (22-23)

An Ordinance to amend Title Five – Land Development Chapter 1154 of the Codified Ordinances of the City of Marietta, Ohio, pertaining to Development Standards.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MARIETTA, OHIO:

Section 1: That Chapter 1154 of the Codified Ordinances of the City of Marietta, Ohio, shall be and is hereby amended to read as follows:

CHAPTER 1154
Development Standards

1154.01 Minimum standards.

1154.02 General principles of design and construction.

1154.03 Slope design and grading requirements. 1154.04 Water management.

1154.05 Erosion and sediment control.

1154.01 MINIMUM STANDARDS.

(a) The standards stated in this chapter are minimum requirements. Practices used to satisfy these standards shall meet or exceed all of the technical standards and specifications for measures for soil stabilization, runoff control, and sediment and erosion control detailed in the current version of the EPA NPDES General Permit for Construction Site Stormwater and Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection, which is incorporated herein by reference, as well as additional criteria as stated herein.

(b) No new development shall be undertaken except in compliance with the standards and criteria set forth in this Title.

(Ord. 246(98-99). Passed 12-31-99; Ord. 114(00-01). Passed 9-21-00.)

1154.02 GENERAL PRINCIPLES OF DESIGN AND CONSTRUCTION.

All development shall be planned and executed so as to:

- (a) Avoid unnecessary earth disturbing activity;
- (b) Be fitted to the terrain in such a way as to preserve natural topographic features and vegetative cover insofar as possible and to minimize change to existing contours;
- (c) Confine earth-disturbing activities to the least sensitive areas of the property;
- (d) Minimize the extent of paved areas;
- (e) Avoid acceleration of runoff; and,
- (f) Preserve natural drainage systems.

(Ord. 246(98-99). Passed 12-31-99.)

1154.03 SLOPE DESIGN AND GRADING REQUIREMENTS.

When determining appropriate grading and sloping stabilization measures, consideration shall be given to length and steepness of slope, soil type, unsloped drainage area, groundwater conditions and proposed land use. Technical standards and specifications for measures to be taken to meet the following criteria are found in the current version of the EPA NPDES General Permit For Construction Site Stormwater and Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection.

- (a) Unstable Lands. Wherever the geologic stability of natural or man-made slopes may be threatened by new development, the developer shall take protective measures, including but not limited to retention structures and/or the setbacks described in Section 1154.03(b)(3), to stabilize such slopes both within and with the approval of the appropriate landowner, outside of the development area, in order to protect the public health, safety, and welfare.
Lands identified by the City of Marietta as having a medium or high landslide/soil slippage potential shall not be graded, excavated, or filled or have loads imposed upon them unless the work is done in accordance with a stability analysis and development plan prepared and certified by a Registered Professional Engineer, as prescribed in Section 1153.05 "Plan Contents"
- (b) Cut and Fill Slopes. Cut and fill slopes shall be designed, constructed, and maintained in a manner that will maximize stability and minimize erosion. Consideration shall be given to length and steepness of slope, soil type unsloped drainage area, and groundwater conditions when determining appropriate drainage management and slope stabilization measures. The following standards and specifications are in addition to those state in the current version of Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection.
1. Rock or similar irreducible material with a maximum dimension greater than eight (8) inches, organic materials, and construction and demolition debris shall be prohibited from fills, unless such fills are intended and approved by the City as mass rock fills or disposal fills.
 2. Fills shall be compacted to a density that is appropriate for the intended use. That density shall be determined by laboratory analysis of the fill material prior to its placement. Field density shall be determined by a recognized standard procedure as approved by the City Engineer. Results of any required laboratory and field density analyses shall be filed with the City; and
 3. The horizontal distance from the top and from the toe of an existing or proposed unrestrained cut or fill slope to the nearest existing or proposed structure, property line, or paved surface shall be at least one-half ($\frac{1}{2}$) the vertical height of the cut or fill, unless the City Engineer shall approve a different distance as appropriate based upon local geology or character of materials. (See Figure 1)
 4. There shall be a minimum two percent (2%) surface grade from all buildings. (Ord. 246(98-99). Passed 12-31-99; Ord. 114(00-01). Passed 9-21-00.)

1154.04 WATER MANAGEMENT.

All development shall include provision for safe and efficient removal of surface and subsurface waters from the site. Technical standards and specifications for measures to be taken to meet the following criteria are found in the current version of the EPA NPDES General Permit For Construction Site Stormwater and Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection.

- (a) Drainage ways to Remain Clear of Obstruction. Except for stormwater control facilities approved by the City, no new temporary or permanent structure to fill and no storage of materials or equipment (other than watercraft) shall be permitted within the channels or floodways of permanent or intermittent streams, drainage ditches, or any other drainage facility or system, unless the developer submits an engineering analysis that demonstrates:
- (1) That such development will not impair the capacity of such facility or system, either by itself or by catching or collecting debris carried by flowing water.
 - (2) That such structures, materials, or equipment will not be subject to damage by flowing water or materials carried by flowing water at velocities likely to be encountered during floods; and,

- (3) That no such structure or material or equipment shall be susceptible to being entrained and transported by flowing water, thereby to pose a threat to downstream property.
- (b) Ponds Less Than 4,000 Square Feet. Ponds with a surface area less than 4000 square feet are exempt from the prohibitions in Section 1154.02. Ponds with surface area greater than 4000 square feet are exempt from the prohibitions of Section 1154.02 provided the design is inspected and approved by the City Engineer.
- (c) Disposal of Stormwater. All drainage facilities shall be designed and maintained to carry surface and/or subsurface waters to the nearest practical storm drain or natural watercourse approved by the City as a safe place to deposit such waters. Concentrated stormwater shall not be allowed to flow down the face of a slope unless it is contained within an adequate channel, flume, or slope drain structure with approved energy dissipation. The grade of drainage facilities shall be sufficient to maintain sediment in suspension.
- (d) Stormwater Structures to be Related to Downstream Discharge Facilities. Stormwater retention and detention structures and drainage facilities shall be designed and maintained so as not to overload downstream discharge facilities.
- (e) Erosion and Flood Control in Outfalls and Channels. Storm outfalls and constructed or modified channels shall be designed and constructed to withstand the expected velocity of flow from a post development, twenty five -year frequency, 24-hour duration storm without eroding or flooding. Where such conduits may cross unstable slopes or slopes capable of becoming unstable with the addition of significant water, the conduits shall be lined with a water-resistant material.
- (f) Stormwater Control for Development Areas Disturbing One Acre or More or Within a Common Plan of Development . Shall meet the requirements for earth disturbed area (EDA) as described in the current edition of the EPA NPDES General Permit For Construction Site Stormwater. To control stream channel erosion and sediment pollution caused by increased stormwater runoff rates and volumes, stormwater runoff from development areas shall be restricted so that development does not increase peak runoff rates so that any increase in runoff volume consequent to development is compensated for by a reduction in runoff rates, as follows:
 - (1) Development shall not increase rate of runoff. The peak rates of runoff from any area following development shall be no greater than the peak rates of runoff from equivalent-size storms in the same area prior to that development for all twenty-four (24) hour storms from one-to-one-hundred-year frequency. Design and development to match the peak rate of runoff for the one-, five-, ten-, twenty-five-, fifty-, and one-hundred-year storms shall be considered adequate to meet this standard.
 - (2) Increase in volume of runoff requires reduction in rate of runoff. If the volume of runoff from an area is projected to be greater after development than before development, the volume increaseshall be compensated for by reducing the peak rate of runoff from the critical storm and all morefrequent storms occurring on the development area to the peak rate of runoff from a one-year-frequency, twenty-four-hour storm occurring on the same area under pre-development conditions. For storms of less frequent occurrence (longer return periods) than the critical storm, up to the one-hundred-year storm, development need only comply with paragraph (f)(1) above.

The critical storm for a specific development area is determined as follows:

- A. Calculate the total volumes of runoff from a one-year-frequency, twenty-four hour storm occurring on the development area both before and after development.
- B. From the volumes calculated in paragraph (2) A. above, calculate the percent increase in volume of runoff that will result from the proposed development. Using this percentage, select the appropriate critical storm from the following table:

Percentage Increase in Volume of Runoff		"Critical Storm" Discharge Limitation	
	(at least)	(but less than)	
00		10	1 year
10		20	2 years
20		50	5 years
50		100	10 years
100		250	25 years
250		500	50
years			
500			
(or more)			100 years

- (3) Points at which runoff is to be calculated. The requirements of this Section for runoff rates and volumes shall be satisfied at each location where runoff leaves the development area.
- (4) Points at which runoff is to be calculated. The requirements of this Section for runoff rates and volumes shall be satisfied at each location where runoff leaves the development area.
- (5) Access easements. Permanent access and access easements, a minimum of 20-feet wide, shall be provided to allow inspection and maintenance of stormwater control structures and stormwater conveyance systems.
- (g) Drainage Facility Design. Where a development area is large enough to require the preparation of a drainage analysis, all drainage facilities shall be designed by a professional engineer in accordance with their commendations of that analysis.

(Ord. 246(98-99). Passed 12-31-99; Ord. 114(00-01). Passed 9-21-00.)

1154.05 EROSION AND SEDIMENT CONTROL.

The potential for sediment pollution of water resources shall be addressed both by minimizing erosion at the development site and by filtering development site runoff to remove suspended sediment. Technical standards and specifications for measures to be taken to meet the following criteria are found in the current version of the EPA NPDES General Permit For Construction Site Stormwater and Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection.

- (a) Minimization of Erosion During Development.

- (1) Denudation and temporary stabilization.

- A. Only the minimum necessary part of the total development area shall be denuded at any one time.

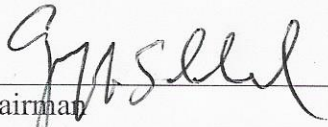
- B. Temporary soil stabilization treatment shall be applied within seven (7) days following rough grading of denuded areas that will remain dormant (undisturbed) for longer than fourteen (14) days. All necessary steps shall be taken to condition the soil to promote proper vegetative growth. Disturbed areas within fifty (50) feet of a stream shall be stabilized within two (2) days.
 - C. Soil stockpiles shall be stabilized and protected with sediment trapping measures as necessary to prevent soil loss.
- (2) Working in or crossing streams.
- A. If a flowing stream must be crossed by construction vehicles regularly during construction, a temporary stream crossing shall be provided. The structure size shall be approved by the City Engineer.
 - B. Construction vehicles shall be kept out of streams to the extent possible. Where in-channel work is necessary, precautions shall be taken to stabilize the work area during construction to minimize erosion. Stream channels (including bed and banks) shall be restabilized immediately after in-channel work is completed.
- (3) Construction access routes. Measures shall be taken to prevent soil transport by vehicles tracking onto surfaces where runoff is not checked by sediment controls, or onto public roads. If soil is transported onto a public road surface by vehicles or by runoff, the roads shall be cleaned thoroughly throughout each day. Soil shall be removed from paved surfaces by shoveling or sweeping. Street washing shall be utilized only after soil has been removed by shoveling or sweeping.
- (4) Temporary open trenches. Where a temporary open trench accumulates water, the City Engineer shall have the power to order the installation and use of dewatering devices and to prescribe the manner of their discharge, so that no safety hazard occurs and neither resources nor off-site property shall be adversely affected.
- (5) Sloughing and dumping. No soil, rocks, debris, or any other material shall be dumped or placed into water resources or into such proximity that it may readily slough, slip, or erode into water resources, unless such dumping or placing has been authorized by the City Engineer and, when applicable, by the Army Corps of Engineers and/or the Federal Emergency Management Agency (FEMA). (Authorization would be considered for such purposes as, but not limited to, constructing bridges, culverts, erosion control structures, and other in-stream or channel-bank improvement works.)
- (b) Temporary Measures for Removal of Suspended Sediment from Runoff. Until all denuded areas have been permanently stabilized against slippage and erosion by vegetative or other measures, the following temporary sediment removal standards shall apply:
- (1) Timing of sediment trapping practices. Sediment trapping practices shall be made functional before upslope land disturbance takes place and shall remain functional throughout earth-disturbing activity. Settling facilities, perimeter controls, and other practices intended to trap sediment shall be implemented before grading and grubbing. They shall continue to function until the upslope development area is re-stabilized.
 - (2) Sediment filters. Sheet flow runoff from denuded areas shall be passed through sediment filters such as a silt fence or be diverted to settling facilities, in order to protect adjacent properties and water resources.

- (3) Settling facilities. Concentrated stormwater runoff denuded areas shall pass through a temporary sediment-settling facility that has a dewatering storage capacity of sixty-seven (67) cubic yards per acre of drainage area with a minimum 48-hour drain time and a sediment storage zone of one thousand cubic feet per disturbed acre. Sediment settling facilities shall be dewatered at the pond surface using a skimmer or equivalent device. If the size of the denuded area contributing runoff is five (5) acres or more within a single watershed, the settling facility shall be a sediment basin. If effective perimeter controls are used on the subject property or on adjacent property, and/or if filtration is accomplished, then the size of the settling facility may, with approval of the City Engineer, be modified from the minimum.
 - (4) Storm sewer inlet protection. All storm sewer inlets that accept runoff from the development area shall be protected so that sediment-laden water will not enter the storm sewer system without first being passed through a sediment filter or otherwise treated to remove sediment.
- (c) Following Development.
- (1) Establishing of permanent vegetation. A permanent vegetation cover shall be established and maintained on denuded areas that are not otherwise permanently stabilized. Permanent soil stabilization treatment shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site. In the event of adverse weather conditions, a reasonable extension of this time period may be approved by the City Engineer. All necessary steps shall be taken to condition the soil to promote proper vegetative growth. Permanent vegetation shall be considered established only when a ground cover is achieved that is mature and extensive enough to control soil erosion and to survive severe weather conditions.
 - (2) Cessation of temporary practices and disposition of temporary facilities. All temporary erosion and sediment control practices shall cease and temporary facilities shall be disposed of within thirty (30) days after final site stabilization is achieved or after they are no longer needed, unless otherwise authorized by the City Engineer. Trapped sediment shall be removed or permanently stabilized to prevent further erosion.
 - (3) Maintenance. All temporary and permanent erosion and sediment control practices and facilities shall be maintained and repaired as needed to assure continued performance of their intended function.
(Ord. 246(98-99). Passed 12-31-99; Ord. 114(00-01). Passed 9-21-00.)

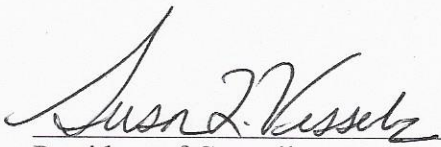
Section 2: That the previous Chapter 1154 of the Codified Ordinances of the City of Marietta, Ohio shall be and is hereby repealed in its entirety.

Section 3: That this Ordinance shall take effect and be in full force from and after the earliest time allowed by law.


Introduced by the Planning, Zoning & Annexation Committee, Geoff Schenkel, Chairman.


Chairman

Passed this 15th day of June, 2023.


President of Council

ATTEST:


Clerk of Council

Approved this 15th day of June, 2023.


Mayor

First Reading June 15, 2023

Second Reading Suspended

Third Reading Suspended