

**ARTICLE VIII  
MINIMUM DESIGN STANDARDS AND REQUIREMENTS**

**Section 8.01                      Conformity with Requirements**

The design standards and requirements of this Article shall apply to all subdivisions of land as defined in Article II.

A.                      Conformity with City Standards

All public improvements undertaken in any subdivision shall conform to the standards of this Article, the *City Standard Plans and Specifications*, and the Southwest Ohio Engineering Association Design Criteria, as adopted by the City of Greenville in Ordinance 76-109.

B.                      Conformity with Zoning

No final plat of land shall be approved unless it conforms with the Zoning Ordinance of the City of Greenville, as may be subsequently amended.

C.                      Land Use / Master Planning

The design of a proposed subdivision of land shall be in general conformity with any adopted land use and/or comprehensive plan prepared by the City for the area.

**Section 8.02                      General Subdivision Design**

The development of the subdivision shall be based on an analysis of environmental characteristics of the site. To the maximum extent possible, development shall be located so as to preserve the natural features of the site, avoid areas of environmental sensitivity, and minimize negative impacts on and alteration of natural features. The following specific areas shall be preserved as undeveloped open space, to the extent consistent with reasonable utilization of the land, in accordance with other applicable state or local regulations:

- A.                      Wetlands, as defined in Section 404, Federal Water Pollution Control Act Amendments of 1982, subject to field verification by the US Army Corps of Engineers, or other agency authorized to make such determination;
- B.                      Significant trees or wooded areas, defined as the largest known individual trees of each species in the state, large trees approaching the diameter of the known largest tree or species or groups of trees that are rare to the area or of particular horticultural or landscape value;
- C.                      Lands subject to flooding, as specified in Section 8.03 below;
- D.                      Slopes in excess of fifteen percent (15%) unless appropriate engineering

methods are employed to address erosion, stability and resident safety;

- E. Historically significant structures and/or sites, as listed on, or eligible for inclusion, on the National Register of Historic Places;

**Section 8.03 Land Not Suited for Development**

If the Planning and Zoning Commission finds that land proposed for subdivision development is unsuitable due to flooding, poor drainage, topography, inadequate public facilities, and/or other condition that may be detrimental to the general health, safety or welfare of the public, and if it is determined that the land should not be developed for the purpose proposed, the Commission shall not approve such subdivision unless adequate methods are proposed by the Owner/Developer for alleviating the problems that would be created by development of the land.

- A. Land Subject to Flooding

The Planning and Zoning Commission shall not allow subdivision of land or lands subject to flooding, as defined in Article II of this Ordinance, unless the following requirements are met:

1. No subdivision or part thereof shall be approved if the proposed subdivision development will, individually or collectively, significantly increase flood flows, heights or damages.
2. No subdivision, or part thereof, shall be approved for floodway fringe areas which will substantially affect the storage capacity of the flood plain
3. Building sites used or intended to be used for human occupation shall not be permitted in floodway areas. Sites for these uses may be permitted outside the floodway if the sites or structures are developed in compliance with Chapter 1450 of the Codified Ordinances of the City of Greenville, as may be subsequently amended.
4. When the Planning and Zoning Commission determines that only part of a proposed plat can be developed in compliance with these requirements, it shall limit development to only that portion, and shall require that the method of development is consistent with its determination.
5. The Planning and Zoning Commission may attach other reasonable conditions as is appropriate to the approval of plats within areas subject to flooding. Such conditions may include, but are not limited to, requirement for the construction of dikes, levees or other similar measures, or floodproofing of structures.

**Section 8.04 Erosion and Sedimentation Control**

Measures shall be taken by the Owner/Developer to minimize erosion and its impacts during subdivision construction activity. The Planning and Zoning Commission, upon recommendation of the City Engineer, shall require detailed erosion and

sedimentation plans to be submitted if it determines that the size and/or scale of the proposed subdivision warrants such action. Such a plan shall be required for major subdivisions comprising more than twenty (20) lots or more than five (5) acres. Such plans shall indicate the techniques to be used to control erosion both during construction and permanently, and include a schedule for installing same. Erosion control plans shall be based on the control of erosion on-site, with the objective of eliminating or minimizing erosion and sedimentation impacts off-site. Techniques, devices and/or measures used shall be reviewed and approved by the City Engineer.

All erosion and sedimentation control devices shall be in place at the start of construction activity.

### **Section 8.05 Surface Runoff and Storm Drainage**

#### **A. Outlets**

No subdivision shall be approved by the Planning and Zoning Commission unless there is an adequate outlet for stormwater as determined by the City Engineer. Generally it will be necessary to pipe storm water to an adequate watercourse, stream or existing storm system which has the capacity to accommodate the flow, or to utilize acceptable on-site water retention/detention methods in compliance with the Southwest Ohio Engineering Association Design Criteria, as adopted by the City of Greenville in Ordinance 76-109, to minimize excessive off-site stormwater flows.

#### **B. Preservation of Natural Drainage Courses**

No natural drainage course shall be altered and no fill, buildings or structures shall be located unless provision is made for the flow of surface water, in a manner satisfactory to the City Engineer. An easement shall be provided on both sides of the existing surface drainage course adequate for the purpose of future widening, deepening, enclosing or otherwise improving said drainage course. If such drainage course crosses private property, easements must be obtained by the Owner/Developer for construction and future maintenance. These easements must be shown on the Construction Plans, including the volume and page number of the recorded easement.

#### **C. Grades**

All surface areas not covered by hard surface improvements or stone shall be seeded or sodded and sloped to drain according to the following:

1. Grass areas shall have a minimum slope or grade of eight-tenths of one percent (.8%).
2. Grass areas next to buildings shall slope away from the building at not less than five percent (5%) for a minimum of ten feet.
3. Ditches or swales in grassed areas with a bottom slope or grade between two percent and seven percent (2-7%) shall be sodded.
4. Ditches or swales with a bottom slope or grade greater than seven percent

(7%) shall have a paved or concrete gutter.

D. Submittal of Drainage Data

Information and data pertaining to water volumes and velocities for all watersheds entering and on the property, along with calculations to show that proposed drainage improvements will adequately address such flows, shall be submitted to the City Engineer, along with required Construction and Grading Plans. Storm drainage systems shall generally be designed so that the peak rate of stormwater runoff from the site after development, does not exceed the peak rate of runoff before development; however, the City Engineer may grant administrative exceptions to this requirement when specific conditions warrant such action. The methods and techniques proposed to address surface runoff shall be designed to accommodate the 100 year frequency storm.

E. Culverts

All culverts utilized in subdivisions shall have the appropriate headwalls and other structures and improvements to protect the facility, as determined by the City Engineer.

**Section 8.06 Streets**

A. General

The arrangement of streets shall generally conform to the Official Thoroughfare Plan for the City. When a proposed subdivision includes any portion or segment of a proposed arterial or collector street as designated on the Official Thoroughfare Plan, such street right-of-way shall be platted by the Owner/Developer in the location so designated. For streets not indicated on the Thoroughfare Plan, the arrangement shall provide for appropriate extensions of existing streets.

B. Classification, Street Widths and Street Grades

The arrangement and classification of all streets in newly developed areas shall conform to the Thoroughfare Plan. The Planning and Zoning Commission shall make the final determination as to the classification of any new street, based on the potential development of the site, and its potential traffic volume, expressed in ADT (Average Daily Traffic), the character of the surrounding area, and the Thoroughfare Plan. Rights-of-way, pavement widths and street grades shall be as specified in APPENDIX A , which is hereby made a part of this Ordinance.

C Alignment

1. The street pattern shall make provision for the continuance of streets into adjoining areas and for the connection to existing rights-of-way in adjacent

areas.

- 2. If a subdivision adjoins or contains an existing or proposed arterial or major collector street, the Planning and Zoning Commission may require marginal access streets or reverse frontage with a planting strip of a minimum width of twenty feet (20') on the rear of those lots abutting the street, and no vehicular access across the strip.
- 3. Local streets shall be laid out so as to discourage use by through traffic.
- 4. Streets shall intersect one another at ninety (90) degrees, or as near to ninety (90) degrees as possible. The intersecting street must remain within these degree parameters for a distance of not less than one-hundred feet (100') from the intersection.
- 5. Street jogs shall be discouraged. Where such jogs are unavoidable, in no case shall the centerlines be offset by less than 125 feet.
- 6. The maximum length of a cul-de-sac shall be 600 feet, measured from the centerline of the intersecting street to the middle of the turnaround.
- 7. Half width streets shall be prohibited.

D. Dedication

The necessary rights-of-way for widening or extension of all thoroughfares, as delineated in the Thoroughfare Plan, shall be dedicated to public use. When a subdivision fronts on an existing City street, dedication shall be made to the proper authority so as to meet the requirements of the table in APPENDIX A.

E. Blocks

Blocks shall not exceed 1,500 feet in length except where specific topographic conditions require a greater length.

F. Street Names

The names of new streets shall not duplicate names of existing dedicated streets except that new streets which are extensions of existing streets shall bear the names of such existing streets. All new roadways shall be named according to the following manner:

<b>DIRECTION</b>	<b>CUL-DE-SACS.</b>	<b>ALL OTHER STREETS.</b>
<i>North/South</i>	<i>Place</i>	<i>Street</i>
<i>East/West</i>	<i>Court</i>	<i>Avenue</i>
<i>Diagonal</i>	<i>Way</i>	<i>Road</i>
<i>Curving</i>	<i>Way</i>	<i>Drive</i>

G. Curbs, Gutters and Sidewalks

Curbs, gutters and sidewalks shall be required in all subdivisions. In no case shall a Certificate of Zoning Compliance, as required by Section 4.09 of the Zoning Ordinance, be granted for a building within a new subdivision until the sidewalks on the lot are constructed and approved. Notwithstanding the above, sidewalks in all

portions of the subdivision may be required by the Planning and Zoning Commission within five (5) years after the date of plat approval by the City. The City retains the authority to require the installation of sidewalks on individual lots through assessment procedures pursuant to Chapter 729 of the Ohio Revised Code.

H. Driveways

1. All driveways shall be at least three (3) feet from the side lot line.
2. No driveway shall be approved providing direct access from a single or two family residential lot to a street designated on the Thoroughfare Plan as an arterial or major collector street, except where no alternative access is available. Such lots shall be provided with on-lot turnarounds.

**Section 8.07 Lots**

- A. All lots shall have the required frontage on an improved public street or an approved private street.
- B. Lots in subdivisions located within the City of Greenville shall meet the dimension and area requirements of the zoning district in which such subdivision is located. In addition, residential lots shall conform to the following requirements:
1. All residential lots shall be approximately rectangular in shape, and should not have a depth in excess of three (3) times their width, except where extra depth is necessary due to topography and/or natural conditions, or to meet the requirements of Section 8.06 C2.
  2. Double frontage and reverse frontage lots should be avoided, except where required to provide separation from arterial streets, or to overcome specific conditions of topography and/or orientation. In such cases, an easement shall be provided along the rear lot line across which there shall be no vehicular access.
  3. Whenever possible, side lot lines should be at right angles or radial to street lines.
  4. Except where alleys are provided for such purpose, necessary easements shall be provided along side and rear lot lines.
  5. Easements shall be provided on both sides of any open drainage course, for the purposes of widening, deepening or general maintenance. Such easements shall be a minimum of twenty feet (20') on both sides. In no case shall a fence or any other obstruction be constructed on this easement.

**Section 8.08 Sanitary Sewers**

- A. Sanitary sewers should be designed to maintain a minimum velocity of two (2) feet per second. The design of the overall sewer system shall be in conformance with the requirements of the City Standard Specifications, the Ohio Environmental Protection Agency (OEPA), the Ohio Department of Health and Ten State Standards.
- B. Sanitary sewer lines should be located in the street right-of-way, except under special conditions, when this requirement may be waived by the Planning and Zoning Commission.
- C. Only under circumstances of extreme hardship shall sewage lift stations, sewage grinder pumps or individual household sewage disposal systems be permitted in subdivisions established after the effective date of this Ordinance. Such systems shall only be permitted with the approval of the Planning and Zoning Commission, upon recommendation of the City Engineer. The Owner/Developer shall be responsible for all costs associated with the lift station until such time that fifty percent (50%) of the lots in the subdivision are developed.
- D. Minimum line size shall be eight inches (8"). Downstream sewer pipe sizes shall be greater than or equal to the upstream size unless otherwise approved by the City Engineer. If larger pipe sizes are required to accommodate future growth, the City may participate in the costs associated with the larger sizes, in accordance with Article VII of this Ordinance.

**Section 8.09                      Water Lines**

- A. Water lines shall be designed, sized and constructed so as to be in conformance with the City Standard Plans and Specifications. Fire hydrants shall be located, so that adequate fire flow to each structure, based on the current guidelines of the Insurance Services Office (ISO) can be met.
- B. Water lines should be located within the street right-of-way, except under special circumstances, when this requirement may be waived by the Planning and Zoning Commission.
- C. The standard minimum size of water mains shall be eight inches (8"). If larger line sizes are required to accommodate future growth, or to provide for fire flows in excess of those required for the proposed development, the City may participate in costs for the size increase, in accordance with the procedures of Article VII of this Ordinance.
- D. Minimum cover for water lines shall be forty-eight inches (48"). Water mains shall be laid so that at least ten feet (10') of horizontal distance and eighteen inches (18") vertical distance is maintained

between the water main and sanitary sewer line. In cases where ten feet (10') of horizontal distance cannot be maintained, such as a crossing, the vertical distance shall be maintained. At crossings, one full length of water pipe should be used so both joints will be as far away from the sewer line as possible.

**Section 8.10                      Underground Utilities and Street Lighting**

- A.                      Underground utilities shall be required for all subdivisions within the subdivision jurisdiction of the City of Greenville. Easements for such utilities, where needed, shall be provided along side and/ or rear lot lines in accordance with Section 8.07B5 above. No above ground appurtenances associated with utility provision (other than fire hydrants) shall be located within the front yards of any residential lots.
- B.                      Street lights shall be required for all subdivisions within corporate boundaries of the City of Greenville, and for all subdivisions where the total number of residential lots exceeds ten (10), or where the lots average one hundred feet (100') or less of frontage, as shown on the preliminary plat.
- C.                      Street lights and all appurtenances shall be installed by the Owner/Developer, and shall be of a type acceptable for cost-effective service by the City and electric utility currently providing service to the City.
- D.                      Illumination for street lights shall be uniform and shall follow the recommendations of the current Illuminating Engineering Society (IES) Handbook. Generally, street lights shall be located not less than 400 feet apart. Lights shall be placed at each street intersection and within 200 feet from the closed end of each cul-de-sac.

**Section 8.11                      Street Trees**

- A.                      Trees planted in the right-of-way of any street shall not be planted in any location where the City Engineer determines that such placement would create a safety hazard. In no case shall a street tree be planted within fifty feet (50') from an intersection, within thirty feet (30') from any alley approach, or ten feet (10') from any driveway approach.
- B.                      No street tree shall be of such type as listed as an undesirable species in Section 33.04 B of the Zoning Ordinance of the City of Greenville.
- D.                      Any portion of any tree that extends over the curb line shall be maintained to a minimum of fifteen feet (15') from the top of limb to lowest point on portion extending over the curb, and a minimum of eight feet (8') from the sidewalk to the lowest portion of the tree extending over such sidewalk.

## **Section 8.12                      Public Sites and Open Space**

### **A.                                  Required Dedication or Reservation**

Where a proposed park or school site, as shown on a land use and/or comprehensive plan adopted by City Council, is located in whole or in part within a proposed subdivision, the Planning and Zoning Commission may require the following:

1.                                  the dedication to the public of part or all of the proposed site and/or
2.                                  reservation of the site for a period of up to three (3) years to enable acquisition by the appropriate agency or entity.

### **B.                                  Minimum Dedication Requirements**

The Owner/Developer shall be required to reserve a minimum of five percent (5%) of the total area of the land included in the proposed plat as permanent open space. The open space shall either be dedicated to a public agency which has expressed a desire to accept and maintain the open space or shall be transferred to a private association or entity. If the open space is transferred to a private association or entity, acceptable provisions for the perpetual maintenance of the open space shall be stated on the plat.

Land proposed for open space shall be suitable for recreational purposes. The Planning and Zoning Commission shall have the authority to determine whether or not the proposed open space and maintenance provisions are acceptable, based on the recommendations of any open space, land use or comprehensive plan adopted by the City, as well as an evaluation of the shape, topography, location, access and environmental characteristics of the land proposed for dedication. Lands used for the purposes of utilities shall not be considered open space for the purposes of this Ordinance.

### **C.                                  Fee in Lieu of Dedication**

Where the Planning and Zoning Commission determines that the dedication of open space as proposed by the Owner/Developer within the proposed subdivision is not desirable based on the standards cited in Section 8.12 B above, the Owner/Developer shall be required to pay an amount equal to five percent (5%) of the total value of the land within the proposed subdivision, as shown on the current Darke County tax records, to the City of Greenville. This payment in lieu of dedication shall be placed in a separate fund to be used by the City only for the purposes of open space acquisition or improvement of public open space and recreational facilities for the benefit of the residents of the proposed subdivision and adjacent areas.

## **Section 8.13                      Monuments**

A. Location

Monuments shall be placed at the point of intersection of the centerlines of all streets, at the beginning and end of each curved street centerline, at all angle points on the outside boundary of the subdivision, and at the corners of all lots. In those cases where sanitary sewer manholes prevent the setting of monuments at the point of intersection, monuments shall be offset five feet (5') in each direction along the street centerline.

B. When Set

Monuments in the street centerlines shall be placed upon the completion of paving of the streets. All other monuments are to be set upon completion of the street, water, sanitary sewer improvements, and overlot grading and before acceptance of improvements by the City of Greenville.

C. Materials

Monuments within paved areas and markers shall be solid iron pins with a diameter of not less than seven-eighths inch ( $7/8$ " ) and a length not less than thirty inches (30"). Such monuments shall be encased in monument boxes.