

## **ORDINANCE NO. 2145**

### **AN ORDINANCE AMENDING CHAPTER 113 OF THE CITY CODE**

**WHEREAS**, the City Council of the City of Mountain Brook, Alabama (the “City Council”) heretofore has adopted an ordinance (“Stormwater Detention Ordinance”) regulating development that will have an impact on the amount or rate of discharge of stormwater runoff, in the City of Mountain Brook (“City”); and

**WHEREAS**, within the City there are several watersheds or drainage basins with aging infrastructure where efficient and effective conveyance of stormwater runoff during large rainfall events proves difficult and where continued re-development pressure and additions to existing structures further tax these already strained stormwater drainage systems and exacerbate the infrastructure problems; and

**WHEREAS**, as part of developments, the City has seen natural permeable areas covered by impermeable surfaces, such as rooftops, driveways, and parking lots, resulting in more of the rain becoming runoff and leaving sites at a faster rate; and,

**WHEREAS**, to mitigate the adverse effects of development to the existing storm drainage systems and downstream properties, a comprehensive review of city watersheds, existing development, city drainage infrastructure, and best practices with respect to stormwater control was conducted to identify and develop new stormwater regulations; and

**WHEREAS**, such comprehensive review has led to the identification of watersheds or basins in the City that have been determined to have existing stormwater infrastructure problems and/or elevated re-development pressures (“Critical Basins”) and which merit special regulations to help mitigate against those problems and pressures; and

**WHEREAS**, the Critical Basins are identified on the Mountain Brook Drainage Basin Report adopted by the City as a part hereof and depicted on the Critical Basins Exhibit, which is made a part of this Ordinance and approved as the official Critical Basin designation of the City; and

**WHEREAS**, the special regulations for Critical Basins in the City require site-specific stormwater designs that will manage increases in stormwater runoff rates and volume due to proposed developments to pre-development runoff rates and volumes for specified design storm events, which, in turn, will result in post-construction hydrology mimicking pre-development hydrology within each such Critical Basin; and

**WHEREAS**, after receiving public commentary and input from the community about stormwater management in the City, the City Council has determined that it is in the public

interest and in the interest of its residents, property owners and community members that additional development controls in Critical Basins are necessary and appropriate for stormwater control; and

**WHEREAS**, the amendment of the City's Stormwater Detention ordinance to provide for special regulations in the enumerated Critical Basins of the City will promote the public safety, health and general welfare of its residents, property owners, and community members.

**NOW, THEREFORE, BE IT ORDAINED** by the City Council of the City of Mountain Brook as follows:

**Section 1.** Section 113-224(c) of the City Code shall be amended by adding the following definitions:

**“(3) Critical Basin** - Watersheds determined by the City to have existing stormwater infrastructure problems and/or subject to re-development pressure are deemed critical watersheds or critical basins.

**(4) Water Quality Volume (WQ<sub>v</sub>)** – The volume of runoff produced by the 1.1-inch rain event. The WQ<sub>v</sub> can be calculated as shown in the equation below.

$$\text{WQ}_v = 1.1 \text{ inches} \times \text{Additional Impervious Area}”$$

**Section 2.** Chapter 113, Article III of the City Code shall be amended by adding the following as Section 113-231:

**“Section 113-231 -Requirements applicable to development in Critical Basins.**

- (a) *Applicability.* All development occurring within a Critical Basin is subject to the provisions set forth in this section in addition to the other provisions of this Article.
- (b) *Management of Runoff.* Development in Critical Basins are required to manage increases in runoff rate and runoff volume due to a proposed development such that post-development drainage conditions mimic the pre-development (or existing) conditions of the site. Runoff volume controls are required to capture the runoff from the 1.1-inch rain event onsite and infiltrate or manage with extended detention. The runoff volume from the 1.1-inch rainfall event is termed the Water Quality Volume (WQ<sub>v</sub>). For sites with soils that have low infiltration rates or other site constraints that inhibit the use of infiltration measures, extended detention may be used. The WQ<sub>v</sub> must be released over a 24 to 36-hour period when using extending detention to manage runoff volume.
- (c) *Acceptable Measures to Control Runoff Volume.* Acceptable measures to control runoff volume include the following:

1. Bioretention, rain gardens, infiltration swales, or other practices designed to capture and infiltrate runoff
2. Permeable Pavement or paver systems
3. Discharge of impervious surfaces onto pervious areas
4. Other systems or practices intended to infiltrate rainfall may be considered if supported in the Low Impact Development Handbook for the State of Alabama or similar reference and agreed to by the City of Mountain Brook.
5. Extended Detention designed to store and release the  $WQ_v$  over a 24 to 36-hour period.

The  $WQ_v$  from any additional impervious area (or an equivalent area of existing impervious area) must be controlled by directing it to an acceptable stormwater control measure as listed above. A combination of measures may be used to meet the requirements of this article. The stormwater management design shall demonstrate that a runoff volume equal or greater than the  $WQ_v$  is managed onsite by stormwater control measures, or alternately that the runoff volume is not increased.

- (d) *Peak Runoff Rate Controls.* The stormwater management design must also ensure post-development peak runoff rates shall be less than or equal to pre-development values for the 2-year through the 100-year, 24-hour rainfall events.
- (e) *Non-conforming Properties.* For existing properties that exceed the maximum allowable impervious area (maximum building area plus an additional (5) percent of the parcel area), any new development or improvement on the property will require a stormwater management design to mitigate the entire impervious area that is above such maximum allowable impervious area.
- (f) *Stormwater Management Design.* The stormwater management design shall be performed by a registered architect, landscape architect, or engineer. A written analysis or drainage report supported with design calculations shall be submitted to the City along with plans and details to verify the adequacy of the stormwater management design for the property and demonstrate compliance with the requirements of this article.”

**Section 3.** The Mountain Brook Drainage Basin Report and the map titled Critical Basins Exhibit are hereby approved as the official Critical Basin designation of the City and the areas designated as Critical Basins thereby shall be subject to the special regulations set forth in this Ordinance.

**Section 4.** This ordinance is cumulative in nature and is in addition to any power and authority which the City of Mountain Brook may have under any other ordinance or law.

**Section 5.** If any part, section, or subdivision of this ordinance shall be held unconstitutional or invalid for any reason, such holding shall not be construed to invalidate or impair the remainder of this ordinance, which shall continue in full force and effect, notwithstanding such holding.

**Section 6.** All other ordinances or parts of ordinances heretofore adopted by the City Council of the City of Mountain Brook, Alabama which are inconsistent with the provisions of this ordinance are hereby expressly repealed.

**Section 7.** This ordinance shall be effective immediately after adoption and publication as provided by law.

**ADOPTED:** This 10th day of July, 2023.



Council President

**ADOPTED:** This 10th day of July, 2023.



Mayor

**CERTIFICATION**

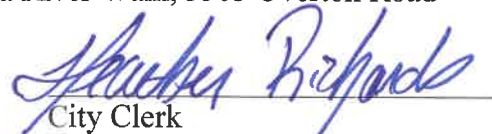
I, Heather Richards, City Clerk of the City of Mountain Brook, Alabama, hereby certify the above to be a true and correct copy of an ordinance adopted by the City Council of the City of Mountain Brook, Alabama, as its meeting held on June 26, 2023, as same appears in the minutes of record of said meeting, and published by posting copies thereof on June 27, 2023, at the following public places, which copies remained posted for five (5) days as required by law.

City Hall, 56 Church Street

Overton Park, 3020 Overton Road

Gilchrist Pharmacy, 2850 Cahaba Road

Cahaba River Walk, 3503 Overton Road



City Clerk