ORDINANCE 22-11

AN ORDINANCE OF THE CITY OF WHITE HOUSE, TENNESSEE AMENDING THE MUNICIPAL CODE TITLE 16, CHAPTER 2 STREET, SIDEWALK AND DRAINAGE DESIGN STANDARDS, SECTION 16-234 AND 16-235.

WHEREAS, the Board of Mayor and Aldermen desire to update the Municipal Code regarding Street, Sidewalk and Drainage Standards;

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen that the White House Municipal Code Title 16, Chapter 2 <u>STREET, SIDEWALK AND DRAINAGE DESIGN STANDARDS</u>, Sections 16-234 AND 16-235 be amended from the Municipal Code as follows:

TITLE 16: STREETS AND SIDEWALKS, ETC.

CHAPTER 2: STREET, SIDEWALK AND DRAINAGE DESIGN STANDARDS

SECTIONS: 16-234 and 16-235

*Amends are made in bold, italics, and underlined text.

16-234. Pipe, culverts, and storm sewers. Pipe used for cross drains under the street and within the city's R-O-W <u>may be HDPE or Polypropylene Pipe and must meet AASHTO Standards or shall be Reinforced Concrete Pipe (RCP).</u> Side drains under driveways, or within the interior of the development, may be RCP or HDPE ADS plastic pipe. Driveway culverts and interior development piping shall be the responsibility of the property owner or the HOA.

- (1) Concrete pipe. Concrete pipe shall be reinforced Class III rigid pipe and shall be round, oval or flat based as shown on the approved plans <u>or special provisions</u>, <u>so long as these meet or exceed specification of this section</u>. All precast concrete pipe shall be manufactured in accordance with the "TDOT Procedures for Manufacture and Acceptance of Precast Drainage Structures, Noise Wall Panels and Retaining Walls."
- (2) Plastic and polyethylene corrugated pipe. This pipe shall be ADS dual wall HOPE HDPE, or, HP storm high-performance Polypropylene Pipe (PP) corrugated outside with smooth finish inside wall. (Referenced in TDOT Spec 914.10 & 914.12): High Density Polyethylene (HDPE) pipe shall conform to AASHTO M294, Type S [Type S is smooth-walled interior, corrugated exterior] & Polypropylene (PP) pipe shall conform to AASHTO M330. Installation (Referenced in TDOT Spec 607); Joint Performance: (TDOT Spec 607.07): HDPE, PP pipe shall be joined in accordance with ASTM D3212 and meet performance requirements for water-tight joints; Fill heights (Table 6A-1): HDPE, PP pipe shall be utilized in applications that are in accordance with TDOT Table 6A-1 (all roadways with up to 16ft of fill height - with the exception of interstate systems and any arterial with full access control); Bedding & Backfill (referenced in TDOT Spec 204.04, 204.11.B): Bedding for pipe culverts shall conform to the requirements of Class A, B, or C bedding, whichever is shown on the plans or in the special provisions; Trench Detail (reference in standard detail D-PB-2/Flexible pipe): Specifies Class "B" bedding material, 6" structural backfill over the crown of the flexible pipe, as well as a trench width 18" on either side of the pipe OD. This pipe may be used for site drainage, but shall only be used under driveways, not and may be used under streets at the discretion of the Public Services Director or his/her designee. Plastic pipe may exit from the back side of a street drainage structure and extend off the city R-O-W. The development HOA shall be responsible for the maintenance of the ADS HDPE or PP plastic pipe outside of the R-O-W. Plastic and polyethylene corrugated pipe shall meet TDOT specifications for pipe material, bedding material, installation, and backfill
- (3) Pipe materials and requirements. All storm sewer drainage pipes located within the roadway right-of-way shall be reinforced concrete pipe (RCP). The minimum size diameter for storm water culvert, is fifteen inches (15"). The minimum slope shall be one-half percent (0.5%) or that necessary to create a full-flow velocity of two feet per second (2 fps).
- (4) Pipe bedding. Pipe bedding for concrete pipe shall be #57 or #67 stone, requiring a minimum of six inches (6") inches of stone below the pipe and shaped by a template to fit the lower part of the pipe exterior for at least ten percent (10%) of its overall height. The depth of bedding material is predicated on soil conditions.

- (5) Pipe sizes. Normal pipe sizes readily available from suppliers may be used to satisfy drainage requirements. Minimum pipe size for culverts, drains and storm sewers shall be one-and one-half inch (1.5") diameter.
- (6) Pipe backfill shall be #57 or #67 stone placed to the spring line of the pipe in layers not to exceed six inches (6"). For pipe installed in solid rock cut, backfill shall be no less than twelve inches (12") above the top of the pipe. (as added by Ord. #19-02, April 2019 Ch18 12-19-19)
- 16-235. Storm water end walls and inlets. Pipe culvert end wall treatments may be precast or cast-in-place concrete and are required for all pipe locations within the street right-of-way.
- (1) End walls for pipe diameters greater than twenty-four inches (24") shall be concrete construction in accordance with the appropriate safety end wall standard drawing (TDOT D-PE series), and shall be fitted with a steel bar safety grate.
- (2) End walls for pipe diameters twenty-four inches (24") or smaller shall be concrete construction in accordance with the straight end wall details as shown in the standard drawings. Type U head walls may be used for pipe diameters of twenty-four inches (24") inches or less if approved by *The Public Services Director or his or her designee.*
- (3) To improve the aesthetics of pipe headwalls, textured concrete finishes simulating stacked stone may be used. Additionally, veneers of stone or brick may be applied to exposed surfaces to enhance the appearance from the street. (as added by Ord. #19-02, April 2019 Ch18 12-19-19)

This ordinance shall become effective upon its final reading and adoption by the Board of Mayor and Aldermen, and publication, the public welfare requiring it.

Farris H. Bibb, Jr., Mayor

First Reading:

June 16, 2022

PASSED

Second Reading:

July 21, 2022

PASSED

ATTEST:

Derek Watson City Recorder