

ORDINANCE NO. 298

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF SWISHER, IOWA, 2015, BY AMENDING CHAPTER 166.11 (6) AND (4)D SUBDIVISION REGULATIONS-MINIMUM REQUIREMENTS

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SWISHER, IOWA:

SECTION 1. CHAPTER 166 SUBDIVISION REGULATIONS, of the Code of Ordinances of the City of Swisher, Iowa, 2015, is hereby established as follows:

CHAPTER 166.11 (6)

FIRE PROTECTION WATER TANK REQUIREMENTS.

(A) WATER RESERVOIR REQUIREMENTS. Developers shall provide emergency water reservoirs for fire protection purposes within subdivisions as follows:

Subdivisions from:

- (1) 5 or more lots: One 30,000-gallon reservoir.
- (2) 51 or more lots: Two 30,000-gallon reservoirs.

(B) PROTECTION TANK LOCATION. The protection tank location shall be determined by the City of Swisher after receiving a recommendation from the Fire Chief and City Engineer.

- (1) If one (1) protection tank is required for residential properties, the tank shall be located within 1,000 feet of all residential properties along unobstructed roadway (measured along the centerline to the nearest lot line, extended).
- (2) If two (2) or more protection tanks are required for residential properties, the tanks shall be equally accessible throughout the subdivision with no more than 1,000 feet of unobstructed roadway (measured along the centerline to the nearest lot line, extended) to a protected structure.
- (3) All commercial properties shall install or be within 1,000 feet of unobstructed roadway (measured along centerline to the nearest lot line, extended) to a 30,000-gallon underground cistern or protection tank.

(C) SPECIFICATIONS.

- (1) Pea Gravel or Granular Backfill Material meeting Iowa DOT requirements will be used for backfilling and for base.
- (2) Tanks must be made of fiberglass or alternate material as approved by the City Engineer and installed to manufacturer's specifications.
- (3) The drafting/suction pipe height above the finished roadway surface shall be twenty-four (24) inches to the centerline of the elbow fitting of the 6-inch pipe. A 2-inch inspection port shall be installed on the vent pipe.
- (4) The drafting pipe shall extend to within six (6) inches of the bottom of the tank with a fitted strainer to protect against debris one-half ($\frac{1}{2}$) inch or more in size. The length of the draft pipe should be kept to a minimum after meeting the requirements of subsection (c). The drafting pipe shall be six (6) inches in diameter and shall terminate horizontally with an elbow to accept a 6-inch national standard female hydrant fitting with cap and chain.
- (5) A screened, 8-inch cistern / site vent pipe with the opening facing downward will be included in all tanks. The vent pipe shall be a minimum of thirty-six (36) inches above the finished roadway surface. The vent pipe shall have a 2-inch capped inspection port located at the top.
- (6) A 4-inch fill pipe with elbow will be provided by the installer which terminates horizontally twenty-four (24) inches above the finished roadway surface, measured at the pipe with 5-inch Storz Connection and cap with two and one-half ($2 \frac{1}{2}$) inch national standard thread adaptor in the cap connected with a chain.
- (7) The maximum distance from the road edge to the drafting pipe shall not exceed eight (8) feet. This will allow a fire pumper, positioned on the finished road surface using one section of standard hard suction hose, to easily reach the draft pipe.
- (8) All aboveground piping shall be primed and then painted red for suction with a six (6) inch adapter, white for vent, and yellow for fill by the installer before the tank is approved for service and filled.
- (9) A twenty-four (24) inch man-way with internal ladder which is terminated at the landscaped surface shall be included in all tanks.

- (10) The contractor installing the tank shall also install a "no parking" sign at a location specified by the Fire Department. The sign and installation shall be at the expense of the developer.
- (11) The installation shall be made with consideration of the winter temperatures. Steps will be taken to ensure the piping and water in the tank will not freeze during extended periods of below zero weather.
- (12) An automatic fill system for replacing the water in the protection tank shall be installed.
- (13) Maintenance of fire protection tanks or cisterns shall be done at the sole expense of the property owner(s) and/or owners' association.
- (14) Installation of a Vent and Sight Assembly for each tank that allows for drive by checks of tank levels approved by the Jefferson-Monroe Fire Department.

(D) ADMINISTRATION.

- (1) Inspections. The developer, or the contractor installing the protection tank, shall notify the Jefferson-Monroe Fire Department protecting the fire district in which the subdivision is located of the completion of the installation for purposes of inspection. Forty-eight (48) hour notification shall be provided, and a \$25.00 fee shall be submitted to the Jefferson-Monroe Fire Department to cover the cost of inspection. All new or upgraded installations shall require inspection. Water tank inspection forms may be obtained from the Swisher City Clerk or Fire Department protecting the district.
- (2) The developer, or contractor installing the protection tank, shall post with the City of Swisher a \$5,000 Performance and Payment bond to be held by the City for a period of two (2) years after the protection tank has received final Fire Department approval pursuant to the City of Swisher's Supplemental Specifications to Iowa Statewide Urban Standard Specifications for Public Improvements.
- (3) Any municipal or private Fire Department may utilize the water tank for fire protection purposes. Refilling shall be accomplished as soon as possible.
- (4) The Fire Department having fire protection responsibility for the district in which the subdivision is located shall inspect the protection tanks in the spring of each year and shall ensure the water tanks are refilled shortly after each use

- (5) The property where the fire protection tank(s) are located shall be dedicated to the City of Swisher as a lot or permanent easement upon the completion of the development.
- (6) This Ordinance shall not apply to any structure with a fire protection sprinkler system installed that meets the current building and NFPA Codes.

(E) OPTIONAL WATER RESERVIOR REQUIREMENTS AND LOCATION WITH FIRE SERVICE DISTRIBUTION SYSTEM

- 1) A change in the amount of water and reservoir locations is acceptable if the following list of items is met:
 - a) A fire service distribution system, buried below the frost line, is constructed from the reservoir with multiple outlet/access points. These outlet/access points are to be able to independently maintain 1,000 GPM fire flow while maintaining positive water pressure at the outlet, with exception of the outlet/access point at the reservoir itself (which is allowed to be a negative pressure drafting set-up)
 - b) The fire service distribution system piping shall be designed and constructed using water main materials meeting the City of Swisher Design Standards for water main grade materials. Piping is to be colored purple and/or marked with locator tape labeled "Fire Protection" to differentiate from potable water piping.
 - c) Adjacent distribution outlet/access points shall be equally accessible throughout the subdivision with no more than 1,000 feet of unobstructed roadway (measured along the centerline to the nearest lot line, extended) to a protected structure.
 - d) All outlet/access points will be constructed as described in Section 3 (C) and (D).
 - e) All outlet/access points must be isolated using a buried gate valve installed below frost depth, with a drain that opens when shut off, to protect from cold weather. The gate valve shall meet requirements for potable water isolation valves in accordance with the City of Swisher Design Standards.
 - f) The gate valve control at the outlet/access must rise at least 3 inches above, and no more than 6 inches beside, the top-most part of the outlet/access piping.
 - g) The gate valve control must fit a 4- or 5-sided hydrant wrench per Jefferson Monroe Fire Department.
 - h) A design plan shall be submitted to the City of Swisher and Jefferson Monroe Fire Department for review, documenting the following:
 - i) Preliminary Plat Map showing number and location of residential, commercial, and industrial properties to be served.
 - ii) Hydraulic calculations for the proposed fire protection piping system to document positive pressure under flow conditions.
 - iii) Details for the outlet/access points.
- 2) If the above items are deemed acceptable by the City of Swisher and the Jefferson Monroe Fire Department Chief Officer, the following allowances shall be acceptable:

- a) Minimum of one (1) 30,000 gallon tank is sufficient for up to 150 residential properties.
 - b) Minimum of one (1) 30,000 gallon tank is sufficient for up to 20 commercial properties.
- 3) The final protection tank locations and fire service distribution system shall be approved by the City of Swisher after receiving a recommendation from the Fire Chief and City Engineer.

CHAPTER 166.11.4D

All water mains and lines shall be placed within the public right-of-way or utility easements located adjacent to the platted right-of-ways or property lines. If it becomes necessary to replace, relocate, or maintain these water mains in the future, any damage within the public right-of-way will be at the expense of the utility owner.

SECTION 2. SEVERABILITY CLAUSE. If any section, provision, or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

SECTION 3. WHEN EFFECTIVE. This ordinance shall be in effect from and after its final passage, approval and publication as provided by law.

approval of same by fixing his signature thereto.

Passed by the council on the 11th day of September 2023 and approved by the Mayor on the 11th day of September 2023.