FIRE PROTECTION POLICY

A JOINT AGREEMENT BETWEEN RUSSELLVILLE FIRE DEPARTMENT AND CITY CORPORATION

Revised April 19, 2006

The fire protection design policy for the City of Russellville is as follows:

GENERAL

Flow criteria, as stated herein, are intended for the purpose of sizing mains for extensions from existing facilities where practical (i.e., where the system is capable of delivering the required pressures and flows) and for the design of large system improvements.

New water line extensions and fire protection facilities, such as mains and hydrants, shall be in working order and have been accepted by the City of Russellville prior to building permits being issued in a new development.

All fire protection policies shall follow the current adopted Arkansas Fire Prevention Code (AFPC) and referenced National Fire Protection Association (NFPA) codes and standards.

Unless otherwise specified in this agreement, fire hydrant procedures such as location, number, distribution and spacing, etc., shall be in accordance to the AFPC.

RESIDENTIAL

1. Public water mains shall be designed to provide adequate fire flow and shall not be less than six (6) inches for fire hydrant service.

2. Main extensions along through streets (primary mains) and/or mains that connect other residential areas shall not be less than eight (8) inches.

3. The minimum fire flow requirements for one- and two-family dwellings having a fire area not exceeding 3,600 square feet shall be 1,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure. Modifications or exceptions shall be subject to the AFPC.

4. Hydrant distribution in residential areas containing one- and two-family dwellings and not exceeding two stories in height:

    A. Through Streets: Maximum distance measured along the curb line between hydrants should not exceed 850 feet.

B. Dead End Streets and Cul-de-sacs: The last hydrant in the cul-de-sac should be located 250 feet plus or minus 50 feet from the farthest building set back line at the end of the street. The next nearest hydrant outside the dead end street should be within 700 feet of the last hydrant.

5. Hydrant distribution in residential areas containing buildings having three or more living units or residential units exceeding three stories in height:

    A. Through Streets: Maximum distance between hydrants should not exceed 350 feet.

    B. Dead End Streets and Cul-de-sacs: The last hydrant in the cul-de-sac should be located 250 feet plus or minus 50 feet from the farthest building set back line at the end of the street. The next nearest hydrant outside of the dead end street should be within 500 feet of the last hydrant.

6. Hydrant placement in cul-de-sacs shall not be placed in the circular portion of a cul-de-sac.

7. Where at all possible, fire hydrants should not be located on dead end mains. Exceptions should be limited to cul-de-sacs as outlined above, and mains, which are planned for future extensions.

AREAS OTHER THAN RESIDENTIAL

1. Public water mains shall be designed to provide adequate fire flow and shall not be less than eight (8) inches for fire hydrant service.

2. The minimum fire flow requirements for buildings other than one- and two-family dwellings shall be specified in the AFPC. The resulting fire flow shall not be less than 1500 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure. Modifications or exceptions shall be subject to the AFPC.

3. Hydrant distribution in areas other than residential:

    a. Through Streets: Maximum distance between hydrants shall not exceed 500 feet.

    b. Dead End Streets and Cul-de-sacs: The last hydrant in the cul-de-sac should be located 250 feet plus or minus 50 feet from the farthest building set back line at the end of the street. The next nearest hydrant outside of the dead end street should be within 500 feet of the last hydrant.

4. Commercial, industrial and residential buildings, other than one- and two-family dwellings, shall be provided with the required minimum number of fire hydrants

and be connected to a water system capable of supplying the fire flow in accordance to the AFPC. The location and number of such on-site hydrants shall have a hydrant available for distribution of hose to any portion of any building on the premises at distances not to exceed 400 ft. Two sources of supply should be available whenever there are more than three (3) fire hydrants and/or sprinkler lead-ins installed on a single system.

5. Where streets are provided with median dividers, or where arterial streets are provided with four (4) or more traffic lanes, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.

6. Neither City Corporation nor the City of Russellville shall be responsible for the cost of installation of water main extensions along new public street projects in undeveloped areas. As these areas develop, each developer shall bear the cost of water main extensions to the limits of their development.

HYDRANT SPECIFICATIONS

1. All fire hydrants shall be of the Clow Medallion as manufactured by the Clow Valve Company.

2. Hydrants shall meet or exceed the requirements of AWWA C-502 “Standard for Dry-Barrel Hydrants.”

3. Hydrants shall be the three-way type with two 2 ½ inch NST outlet nozzles and one 4 ½ inch NST steamer outlet nozzle.

4. The barrel shall be a minimum of 4 ½ inches in diameter.

5. The operating nut shall be 1 ½” diameter and shall open counterclockwise.

6. Hydrants shall be traffic type (break away).

7. Each hydrant shall have its own auxiliary valve. This valve shall be as close to the water main as practical.

8. Leads going from the main to the hydrant shall not be less than six (6) inches.

9. All hydrants shall be painted with a suitable primer and two (2) finish coats in accordance with current AWWA standards. Finish coats shall be Benjamin Moore Safety Yellow M22-15 Urethane Alkyd Gloss Industrial Enamel or equivalent.

10. All hydrants that are private shall be painted industrial grade enamel red.

HYDRANT INSTALLATION

1. Fire hydrants shall be installed in accordance with City Corporation Fire Hydrant Assembly & Auxiliary Valve Detail specification drawings.

2. Hydrants shall be installed so that the steamer connection will face the street.

3. Where practical, hydrants shall be located at street intersections.

4. Hydrants shall be located at least five (5) feet from driveways, streetlights, utility poles or any other objects that may obstruct or hinder the immediate access to the hydrant.

5. Hydrants shall be located in a reasonably uniform manner along streets or access roads, approximately five (5) feet from the curb, to allow for immediate access to the hydrant.

6. Three (3) feet of clear space shall be maintained around the circumference of the fire hydrant.

7. Where applicable to the fire hydrant, fire apparatus access lanes shall be marked in accordance to the AFPC.

8. Where fire hydrants are subject to impact by a motor vehicle, hydrant impact protection shall be installed.

9. New hydrant installations shall be inspected by City Corporation. The developer is responsible for contacting the agency prior to backfilling. Necessary corrections shall be the responsibility and at the expense of the developer.

10. Proper installation and/or acceptance by the Fire Department and City Corporation of mains and hydrants are required prior to building permits being issued.

REVIEW OF PLANS

The Russellville Fire Department and City Corporation shall review plans for all proposed water line extensions for residential, commercial and industrial developments and additional hydrants on existing mains. The Fire Department shall determine the need for on-site fire protection systems. Approved fire protection layouts cannot be altered, abandoned or added to without prior approval of the Russellville Fire Department and City Corporation. Any request for such alterations must be made in writing, complete with drawings, noting the alterations being requested.

All commercial, subdivision or large-scale development projects shall follow the City of Russellville Commercial Permit Process. This process is designed provide all agencies and governing bodies the opportunity to review and approve projects prior to permitting.

Plans for water distribution projects and new hydrant installations shall include:

1. Exact location and size of existing and proposed water mains and hydrants.
2. Exact location of hydrant isolation and control valves.
3. Items that may be pertinent to hydrant placement such as curb lines, property lines, sidewalks, adjacent structures, etc.
4. Flow calculations for each hydrant.
5. Details of hydrant installation.
6. Pertinent occupancy classifications.

This cooperative policy and its enforcement, is required for the health, safety and welfare of the citizens and for the protection of property within and adjacent to the City of Russellville.

_____

Craig Noble, General Manager July 18, 2006
CITY CORPORATION

_____

Dennis Miller, Fire Chief July 18, 2006
RUSSELLVILLE FIRE DEPARTMENT