



# BIG WALNUT JOINT FIRE DISTRICT

P.O. Box 217 Marengo, Ohio 43334

Phone: 419-253-2222 / Fax: 419-253-8215

## Residential & Multi-Family Subdivision Requirements

All supporting documentation showing items listed below are based on the 2017 Ohio Fire Code with Big Walnut Joint Fire District specific provisions and applicable NFPA Standards.

### ADD TO STANDARD NOTES:

- All Subdivisions – Landscaping- Fire Apparatus Access Roads Note: The following shall be added to the general and landscaping notes: “No landscaping at maturity shall encroach on the fire apparatus access road, Twenty-Six Feet (26’) in width and Thirteen-Six Feet (13’6”) in height, *2017 Ohio Fire Code Section 503.2.2 Authority.*
- All Subdivisions – Landscaping- Around Existing or Proposed Fire Hydrants Note: Landscaping shall be of a type that will not encroach within three feet (3’) diameter of A fire hydrant at maturity *2017 Ohio Fire Code, Section 507.5.5 Clear space around hydrants.*
- All Structures – Hydrant Note: Prior to above ground level construction, permanent fire hydrants shall be installed every 400 feet, in service, and a letter received from Del-Co Water Company, or completed by the Fire Prevention Bureau, *2017 Ohio Fire Code, Section 507.5.1.*

### WATER / HYDRANT INFORMATION:

- Minimum Required Fire Flow Note: The minimum required fire flow for protection purposes shall be fifteen hundred gallons per minute (1500GPM). The approved method that shall be used is *Appendix B Table 105.1 of the 2015 International Fire Code. 2017 Ohio Fire Code, Section 507.3*
- Water Flow Test Data Note: Provide water flow test data obtained from the Del-Co Water Company verifying the required water flow for fire protection is available for the site. The water flow test results and graph shall be shown on the submitted plan. The minimum required fire flow for all structures is 1500 g.p.m. in accordance with the *2017 Ohio Fire Code, Section 507.3.* Show the node map and results table for the proposed or existing hydrants on site showing that the required fire flow can be achieved.
- Fire Hydrants:
  - The submitted plan shall clearly indicate the location of all required and/or existing fire hydrants.
  - Fire hydrant(s) located on a fire apparatus access road shall be located not less than Forty Feet (40’) from the buildings to be protected, *2016- NFPA-24 Section 7.2.3*
  - Vehicle parking or other obstructions shall not be permitted in front of / or access to fire hydrants.
  - Landscaping shall be of a type that will not encroach within three feet (3’) radius of a fire hydrant at maturity. *2017 Ohio Fire Code Section 507.5.5*



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- The MAXIMUM SPACING between fire hydrants for all residential and multi-family buildings is four hundred feet (400').
  - A fire hydrant shall be located with-in One Hundred fifty feet (150') of the terminus of a dead end, stub street cul-de-sac, cul-de-loop or Common Access Drive.
  - A fire hydrant shall be located with-in Fifty feet (50') of intersecting streets.
  - Fire hydrants shall be of an approved type and have not less than a six-inch (6") diameter connection with the main. *2016 NFPA 24 Section 7.1.1*
  - 6-inch pipe is only permitted for fire hydrant stubs or fire service mains *2016 NFPA 24 section 5.2.2*
  - Fire Hydrants shall be per Del-Co Water Co. specifications.
  - Fire Hydrant Nozzles shall be two 2.50 NST and one 4-inch Storz w/blind cap.
  - Del-Co Water Co. fire hydrants shall be painted Safety Yellow.
  - Private fire hydrants shall be painted Safety Green.
  - Both shall have a One- and One-half inch (1-1/2") white reflective band installed around the bonnet flange.
- PRIVATE FIRE SERVICE MAINS/ FIRE HYDRANTS (beyond the master water meter) Shall comply with National Fire Protection Association – 24 2016 edition.

#### SITE ACCESS:

- Timing of Installation: Residential or Multi- family, sub-divisions fire apparatus access roads shall be provided as follows: *2017 Ohio Fire Code Section 501.4*
- Additional Access The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access. *2017 Ohio Fire Code Section 503.1.2*

Prior to the above ground construction phase Fire Apparatus Access Roads shall be constructed as Required and be capable of supporting an aerial ladder weighing seventy thousand pounds (70,000 lbs.) under all weather conditions. The 4 aerial ladder stabilizing jacks must be supported by the sub- surface gravel of 90 pounds per square inch (two to total 480 and two to total 308) for a total of 788 square inches of jack pad.

Residential Single Family- The final lift of Asphalt shall be in place.

Multi-Family – the base coat of Asphalt, Concrete, or RPC shall be installed to with-in 150 feet of all portions of the first story.



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- The professional engineer, the installing contractor, and the owner shall complete the roadway Certification of Approval (Original stamped and sealed). This road(s) shall be maintained throughout construction. These apparatus access roads shall be kept clear of construction material, debris, dumpsters, and vehicles.
- Certificate of Approval Form available on this web site shall be the original for all required signatures.
- Access Road(s) full completion prior to occupancy- Prior to the final for Multi-family the final lift(s) of asphalt shall be installed.
- Single and Multi-family Subdivisions - shall require a minimum of 2 Fire Apparatus Access Roads remote of each other and shall intersect to public streets where the total number of dwelling units exceed 30. *2017 Ohio Fire Code D-107.1.*
- Multi-Family Subdivisions- shall require a Fire Apparatus Access Road Width of not less than 26 feet curb to curb. With no parking on either side of the street - *2017 Ohio Fire Code D-105.2.*
- Cal-de-sac bulb diameter- shall not exceed required turning radius face of curb to face of Curb.
- Grade: The grade shall be a maximum of Ten Percent (10%) for all Fire Apparatus Access Roads, and Entrances *2017 Ohio Fire Code, Section 503.2.7.*
- Angles of approach and departure for fire apparatus access roads shall be Ninety Degrees (90°) for all roads. *2017 Ohio Fire Code, Section 503.2.8.*
- Street or road signs. *2017 Ohio Fire Code, Section 505.2* Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs.
- Turning Radius: The minimum turning radius to be provided shall be sixty-five feet (65') outside and thirty-five feet (35') inside. The turning radius shall be demonstrated on the plan by template. *2017 Ohio Fire Code, Section 503.2.4.* Fire apparatus access roadways and fire lanes in excess of One Hundred Fifty Feet (150') dead end, shall be provided with an approved turn-around. Dimensions of the approved turn-around shall be in accordance with *2017 Ohio Fire Code, Section 503.2.5* All dimensions of the turn-around shall be shown on the plans.
- GATES installed on Fire Apparatus Roads Gates installed on fire apparatus access roads shall be equipped with an automatic opener that is a siren operated system (SOS). A residential hinged door Knox Box shall also be installed for Emergency operation of the gate.