Resolution No.:	18-605
Introduced:	September 20, 2016
Adopted:	September 20, 2016

COUNTY COUNCIL
FOR MONTGOMERY COUNTY MARYLAND

Lead Sponsor: Council President on behalf of the County Executive

SUBJECT: Approval of Executive Regulation 9-16, Fire Safety Code - Fire Department Apparatus and Water Supply

Background

1. On July 7, 2016, the County Council received Executive Regulation 9-16, Fire Safety Code - Fire Department Apparatus and Water Supply. The proposed regulation would repeal Executive Regulation 29-08AM, which established in COMCOR 22.00.06, requirements for effective fire department apparatus and water supply in urban, suburban, and rural settings in the County, because these requirements are incorporated into COMCOR 22.00.07 by Executive Regulation 8-16.

2. The Council reviewed the regulation under Method (2). Under Method (2), if the Council does not approve or disapprove a regulation within 60 calendar days after the Council receives the regulation, the regulation automatically takes effect.

3. On September 15, 2016, the Planning Housing, and Economic Development Committee reviewed the proposed regulation and recommended approval.

Action

The County Council for Montgomery County Maryland approves the following resolution:

Executive Regulation 9-16, Fire Department Apparatus and Water Supply is approved.

This is a correct copy of Council action.

Linda M. Lauer

Linda M. Lauer, Clerk of the Council

MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	**Number** 9-16
Originating Department Department of Permitting Services	**Effective Date** August 1, 2016

Montgomery County Regulation on

FIRE SAFETY CODE – FIRE DEPARTMENT APPARATUS ACCESS AND WATER SUPPLY

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES

Issued by: County Executive
Executive Regulation No: 9-16
COMCOR: 22.00.06

Authority: Code Section 22-13 and 22-14
Council Review: Method 2 under Code Section 2A-15
Register: Vol. 30, No. 5
Comment Deadline: July 31, 2016
Effective Date: August 1, 2016

Summary: The provisions of this regulation, Executive Regulation 29-08AM, which establish the requirements for effective fire department apparatus and water supply in urban, suburban and rural settings in Montgomery County, are being incorporated into COMCOR 22.00.07 by Executive Regulation 8-16. In order to avoid duplication, this regulation is repealed.

Address: Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, Maryland 20850

STAFF: For additional information, contact Hemal Mustafa, Manager, Division of Building Construction, 240-777-6226.

MONTGOMERY COUNTY EXECUTIVE REGULATION

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Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	**Number** 9-16
Originating Department Department of Permitting Services	**Effective Date** August 1, 2016

[Section 1. Applicability. In accordance with the procedures authorized in Chapter 22, "Fire Safety Code," of the Montgomery County Code (1994), as amended, this Executive Regulation applies to safeguarding life, property and the public welfare from the risks of fire and explosion arising from the improper storage, handling, or use of materials or devices, and from conditions hazardous to life, property and the public welfare in the use or occupancy of structures or lots and adopts, except as amended in this Regulation, the National Fire Protection Association (NFPA) 1141, Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas, 2008 Edition, and NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition.

a. This regulation applies to all new community and commercial development or redevelopment, road reconstruction, and any changes to existing fire department access.

b. In any conflict between NFPA 1, Uniform Fire Code, and NFPA 1141 or NFPA 1142, the most stringent requirement must prevail except as otherwise provided in:

1. the Fire Safety Code;

2. this regulation; or

3. performance-based design guidance as defined in paragraph 4.b.

Section 2. <u>Definitions</u>.

a. **<u>Fire Department Apparatus Access</u>**. Any approved load-bearing, all-weather surfaces, including public, private, or access roads, driveways, parking lots, shoulders, and buffers, whose use is required to access more than one residential dwelling unit or any non-residential occupied building. Not all roadways are required for fire department apparatus access. In addition to these access surfaces, the Fire Marshal may require, and must approve, all suitable gates, access boxes, and fire lanes to ensure adequate fire department apparatus access.

b. **Fire Lane**. A road or path developed or reserved to allow fire apparatus to pass through congested areas. The Fire Marshal must require and approve all fire lanes on new or existing roads to be clearly marked to prohibit vehicles or obstructions from impeding fire department apparatus access.

c. **Fire Marshal**. For purposes of this Regulation, the Fire Marshal of the Montgomery County Fire and Rescue Service (MCFRS) includes the Fire Marshal's designees.

d. **One- and Two- Family Dwellings**. Detached one- and two-family dwellings and attached single-family dwellings (townhomes) not more than three stories in height with a separate means of egress.

e. **Operating Bay**. Clear and unobstructed fire department apparatus load bearing surface along fire department apparatus access that increases operating width to a minimum of 26 feet wide. It may be defined by bollards and accessed via 3 inch mountable curb. The minimum length of an operating bay is 50 feet.

Section 3. Fire Department Apparatus Access.

The Fire Marshal must review and approve fire department apparatus access for all new development, and any changes made to fire department apparatus access. A fire department apparatus access plan is required as part of any development plan. Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment. The Fire Marshal may require at least two fire department apparatus access roads into new developments when, in the Fire Marshal's opinion, there is substantial risk that a single fire department access road into a community may become impassable.

Section 4. Alternative Application.

The alternative application of performance-based design, as specified in Chapter 5 of NFPA 1, Uniform Fire Code, applies to any fire department apparatus access requirement identified in this Regulation.

a. Performance-based design is the preferred application in all cases. It is the intent of this regulation to be administered in a manner consistent with Chapter 49 of the Montgomery County Code and its executive regulations. Performance-based

design guidance as defined in paragraph 4(b) must be used to resolve any conflicts between this regulation and Chapter 49

b. MCFRS must develop and issue a performance-based design guidance document with assistance from the Departments of Permitting Services, Transportation, and Environmental Protection, Montgomery County Planning Board, and design professionals.

Section 5. <u>Width of Fire Department Apparatus Access</u>.

Fire department apparatus access must be at least 20 feet wide, unless specifically excepted in this Regulation, or as approved by the Fire Marshal. Clear width may include, but is not limited, to multiple features of the cross-section, such as travel lanes, bike lanes, and load-bearing shoulders. Clear width excludes obstructive features such as, but not limited to, parking lanes and non-mountable curbs.

a. On-street parking is allowed on one side if the load-bearing fire department apparatus access is at least 28-feet wide.

b. On-street parking is allowed on both sides if the load-bearing fire department apparatus access is at least 36-feet wide. The required width may increase with additional roadway features, such as pedestrian refuges.

c. Fire department apparatus access serving one- and two-family dwellings of three stories or less, with no superimposed dwelling units or portions of dwelling units, and having no window sill greater than 27 feet from grade on the same side of the structure as fire department apparatus access, may be 26-feet wide and allow parking on one side, if there are 50-foot long operating bays at 300-foot intervals. See Figure 1.

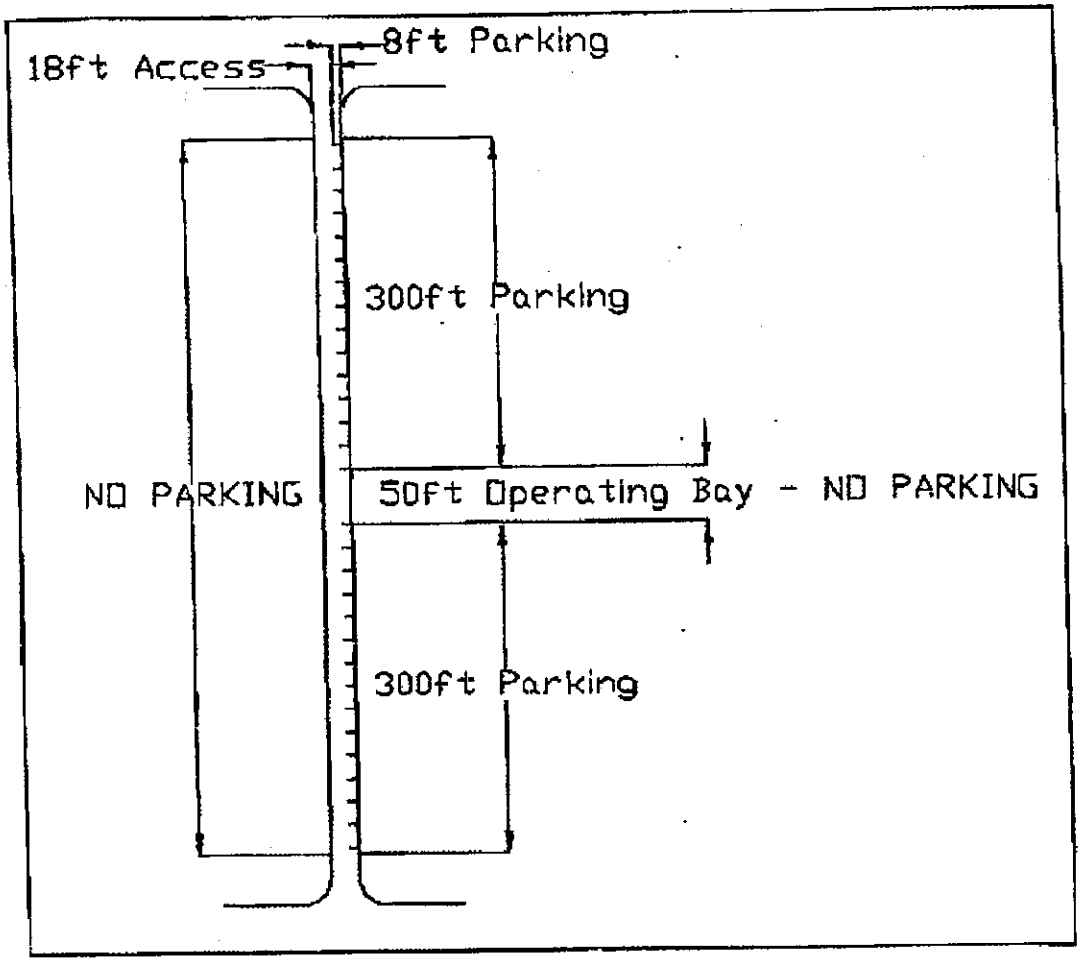

Figure 1. *Operating bay application sketch*

Section 6. **<u>Minimum and Maximum Turning Radii</u>.**

The minimum interior turning radius for fire department apparatus access is 25 feet. The minimum exterior turning radius for fire department apparatus access is 50 feet. This is only required at turning points on fire department apparatus access routes. Performance-based approval of alternative turning radii may be allowed if apparatus movement into opposing lanes of traffic is

minimized and unrestricted fire department apparatus access is maintained.

Section 7. <u>Provision of Dead-End Apparatus Turn-Around</u>.

Dead-end fire department apparatus access greater than 150-feet long must provide an approved apparatus turnaround. Approved designs include a cul-de-sac at the closed end at least 90-feet in diameter, or a T-turnaround, with each leg of the tee at least 60-feet long and 20-feet wide.

Section 8. <u>When a Building Requires an Automatic Sprinkler System</u>.

a. A building must be protected throughout by an approved automatic sprinkler system if any portion of its footprint is more than 150 feet of clear and unobstructed walkable grade from a fire department apparatus access point.

b. No portion of a building footprint in a building protected throughout by an approved automatic sprinkler system can be more than 450 feet of clear and unobstructed walkable grade from a fire department apparatus access point.

Section 9. <u>Access Requirements for Occupied Structures</u>.

a. One- and two-family dwellings of three stories or less, with no superimposed dwelling unit or portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 150 feet of fire department apparatus access.

b. One- and two-family dwellings more than three stories, or dwellings with superimposed dwelling units or a portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of fire department apparatus access.

c. A non-residential occupied structure must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of fire department apparatus access.

d. When fire department apparatus access to a new building cannot be provided, the Fire Marshal may require compensatory actions in the form of additional fire protection features. Compensatory action may include, but is not limited, to upgraded sprinkler protection, onsite water supply, and early notification fire alarm systems.

Section 10. <u>Fire Department Apparatus Access Requirements: Surface, Load-Bearing, Clearance</u>.

a. At-grade fire department apparatus access must have all-weather surface, and must be capable of bearing the heaviest piece of apparatus in the MCFRS fleet at the time of Fire Marshal review and approval.

b. Elevated decks designated as "fire department apparatus access" must have all-weather surface, and be load-bearing up to 75 pounds per square inch, or as specified in Chapter 20 of NFPA Standard 1901, Automotive Fire Apparatus, whichever is greater, or as approved by the Fire Marshal.

c. All buildings, parts of buildings, or other obstructions extending over apparatus access must have a minimum of 13.5 feet vertical clearance from the finished driveway surface. Vertical clearance for any overhead obstruction over arterial roadways must be at least 16 feet from the finished surface. This requirement does not preclude the planting of street trees if maintained appropriately for fire department apparatus access.

Section 11. <u>Water Supply Requirements along Fire Department Apparatus Access Routes.</u>

a. In municipally-supplied areas, hydrants must be spaced not more than 500 feet apart, and within 400 feet from any dead- ends in apparatus travel.

b. In non-municipally supplied areas, static water sources compliant with NFPA 1142, Water Supplies for Suburban and Rural Firefighting, must be sited not more than one mile travel distance along fire department apparatus access routes. If an acceptable water supply does not exist within one mile travel distance from the furthest part of the subdivision at the time of development:

1. Any residential subdivision of more than one dwelling unit must dedicate an easement along the fire department apparatus access route to MCFRS that is appropriate in size for the grading and installation of an underground cistern. An easement may be located outside the boundaries of the subdivision or at another accessible location.

2. Any easement or renewal of an easement must be recorded on the plat or plats of subdivision among the land records of Montgomery County using a model easement provided by the Fire Marshal, and identified as "MCFRS Public Safety Water Supply Easement." Any release of an easement must also be recorded in the land records.

3. If public safety improvements are made on an easement, the improvements must be recorded in the land records and identified as "MCFRS Public Safety Water Supply".

4. Any easement created under this regulation for the purpose of water supply may be released at any time by the Fire Marshal if an alternate, more appropriate site becomes available.

5. If no public safety improvements are made on an easement within 10 years after the easement is first recorded in the land records:

   a. The Fire Marshal may renew the easement for one additional

ten-year term. The grantor of the easement must be notified in writing at least 60 days before the easement is renewed; or

b. The Fire Marshal must release the easement.

6. Non-residential development must install a new, or upgrade an existing water supply, that is acceptable to the Fire Marshal.

Section 12. Administrative Interpretations. The Fire Marshal will issue administrative interpretations as needed to clarify fire department apparatus access requirements for recurrent design issues that are not specifically addressed in this regulation.]

Isiah Leggett, County Executive

June 29, 2016
Date

Approved as to form and legality:

Office of the County Attorney

10 June 2016
Date