MAYOR AND COUNCIL AGENDA

NO. 20 DEPT.: / Community Planning and Development Services DATE: Oct. 21, 2004
Contact: Linda MacDermid, Chief of Inspection Services

ACTION: Introduction and adoption of ordinance to amend Chapter 5 entitled "Buildings and Building Regulations;" Article VI entitled "One and Two Family Dwelling Code."

Adoption of the 2003 Edition of the International Code Council (ICC); International Residential Code for One and Two Family Dwellings with certain deletions, additions and changes.

ACTION STATUS:

FOR THE MEETING OF: 11/1/04

INTRODUCED
PUB. HEARING
INSTRUCTIONS
APPROVED
EFFECTIVE

ROCKVILLE CITY CODE,

CHAPTER 5
SECTION

☐ CONSENT AGENDA

RECOMMENDATION:

Staff recommends that this ordinance be introduced and adopted at the meeting of November 1, 2004. If Mayor and Council wish to introduce the ordinance and proceed to adoption at the same meeting, the ordinance should first be introduced, then a motion should be made to waive the layover period. If the motion to waive the layover period is approved by an affirmative vote of four members of the Mayor and Council, you may then proceed to move to adopt the ordinance.

IMPACT: ☐ Environmental ☐ Fiscal ☐ Neighborhood ☒ Other:
Residential builders.

BACKGROUND:

The attached ordinance repeals the 2000 International Residential Code for One and Two Family Dwellings (IRC) and amendments, and adopts the 2003 Edition of the same Code, with certain deletions, additions, and changes. The State of Maryland has adopted this Code and obligated its political subdivisions to enforce the standards, with or without local amendments. The purpose of amending sections of the International Codes is to incorporate local construction issues, which are specific and important to the jurisdiction. Introduction and adoption of this ordinance assures that the City's amendments (including the requirement for sprinklering of single family dwellings) remain in effect without lapse. The proposed amendments are largely ones that were included at the adoption of the 2000 International Residential Code.

PREPARED BY:

Linda MacDermid, Chief of Inspection Services

APPROVE: Arthur D. Chambers, AICP, Director — Date: 10/26/04

APPROVE: Catherine Tuck Parrish, Acting City Manager — Date: 10/26/04

LIST OF ATTACHMENTS:

1. Ordinance to amend Chapter 5.
2. Memorandum regarding amendments.

Ordinance No. _____ ORDINANCE: To amend Chapter 5 entitled "Buildings and Building Regulations," Article VI. entitled "One and Two Family Dwelling Code" so as to adopt the 2003 Edition of the ICC (International Code Council) International Residential Code for One and Two Family Dwellings with certain deletions, additions and changes

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF ROCKVILLE, MARYLAND, that Chapter 5 entitled "Buildings and Building Regulations," Article VI, entitled "One and Two Family Dwelling Code" be amended as follows:

SECTION 1. That Article VI entitled "One and Two Family Dwelling Code," Section 5-101, "ICC International Residential Code for One and Two-Family Dwellings - Adopted" is amended as follows:

Sec. 5-101. ICC International Residential Code for One and Two-Family Dwellings -- Adopted.

The International Code Council (ICC) International Residential Code for One and Two-Family Dwellings, [2000] 2003 Edition, as issued by the International Code Council, is hereby adopted by reference. One (1) copy of such publication as adopted shall be maintained by the City Clerk in the office of the Mayor and Council located at Rockville City Hall and made available for inspection by the public during regular office hours. Any amendment or change in such publication hereafter promulgated by the International Code Council shall not become a part of this article until they have been duly adopted by the Mayor and Council by ordinance.

SECTION 2. That Section 5-102 is hereby repealed and re-enacted in its entirety as follows:

Sec. 5-102. Same--Amendments.

The ICC International Residential Code for One and Two-Family Dwellings, 2003 Edition, is amended in the following respects:

Section R-101.2 of the International Residential Code (IRC) for One and Two-Family Dwellings, 2003 Edition, is amended to read as follows:

"R-101.2 Scope: The provisions of the IRC for One and Two Family Dwellings shall apply to the construction, enlargement, location, alteration, repair, use,

occupancy, movement, and equipment of detached one-and-two family dwellings and multiple single family dwellings (townhouses) not more than three stories in height and one-family townhouses with loft not exceeding a total of four stories in height and meeting the requirements of Sections R-309, R-310 and R-311 and other applicable requirements of this Code, and accessory structures.

Exception is deleted.

Section R-105.2 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

R-105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. Deleted.
2. Deleted.
3. Retaining walls that are not over 2 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment accessory to a one-or two- family dwelling.
9. Window awnings supported by an exterior wall which do not project more than 54 inches from the exterior wall and do not require additional support.

Electrical:
Repairs and maintenance: A permit shall not be required for minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:
1. Portable heating, cooking or clothes drying appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:
1. Portable heating appliance
2. Portable ventilation appliances.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative cooler.
7. Deleted.
8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:
The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

Section R-105.3.1.1 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section R-106.1.3 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section R-106.3.3 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section R-107 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section R-109 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-109.1 Types of Inspections: For on-site construction, from time to time the building official, upon notification from the permit holder or his agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code. The following inspections must be conducted for all building and structures:"

"R-109.1.1 Foundation: Includes footing inspection, foundation walls, waterproofing, drainage, and back-fill, and ground floor slab. A wall check (house location survey) must be prepared and certified by a Maryland Registered Land Surveyor and submitted for approval to the building official within the time specified by the Division. Framing inspections will not be conducted until such survey is received and approved."

"R-109.1.2 Plumbing, Mechanical, Gas, and Electrical: Conducted prior to concealment, and as often as required by the applicable code document."

"R-109.1.3 Deleted.

"R-109.1.4 Frame and Masonry: Commonly made after the roof, masonry, all framing, firestopping, draftstopping and bracing are in place. Floor framing located 30 inches or closer to the ground must be inspected prior to installing any flooring materials. An inspection is required for masonry fireplaces after the fireplace and first flue section are completed."

"R-109.1.5 Other Inspections: In addition to the inspections listed above, the Division may make or require any other inspections to ascertain compliance with this code and any other laws enforced by the Division. Any required inspections disapproved twice for the same violation will be subject to reinspection fees adopted by resolution of the Mayor and Council. Reinspection fees must be paid before any further inspections can be performed at the building site."

"R-109.1.5.1 Fire Resistance-rated construction inspection. Where fire-resistance-rated construction is required between dwelling units or due to location on property, the building official shall require an inspection of such construction after all lathing and/or wallboard is in place, but before any plaster is applied, or before wallboard joints and fasteners are taped and finished."

"R-109.1.5.2 Insulation and Radon Control: Inspections of all required insulation and radon control features must be conducted prior to concealment."

Section R-109.2 is deleted.

Section R-110.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

R-110.1. Occupancy. No building or structure shall be used or occupied until the building official has issued a certificate of occupancy. Issuance of a certificate of occupancy shall not occur until the building has been inspected and found to be in compliance with the provisions of this code and all other applicable laws and ordinances. Temporary certificates of occupancy will not be issued for one and two family dwellings.

Section R-110.2 is deleted.

Section R-110.3 is deleted

Section R-110.4 is deleted.

Section R-112 is deleted.

Section R-114.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

> "R-114.1 Notice to owner. Upon notice from the building official, work on any building, structure, electrical, gas, mechanical or plumbing system that is being done contrary to the provisions of this code shall immediately cease. Such notice shall be verbal or in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the specific violations and the conditions under which work may be resumed."

Section R-202 of the IRC for One and Two Family Dwellings, 2003 Edition is hereby amended by adding the definition of "Family," "New Construction," "Townhouse," and "Townhouse Loft," and amending the definitions of "Addition" and "Alteration" to read as follows:

"Section R-202. Definitions."

"Addition: a modification to an existing building which changes the footprint or floor area provided that:

- The construction must not, at time of application, exceed the existing footprint by more than 100%;
- At least 50% of the existing first floor exterior walls, in their entirety (measured in linear feet) and comprising the footprint of the existing building, must remain as exterior walls. The determination of first floor exterior walls is those which have the finished floor surface entirely above grade;
- Any increase in building height is subject to current zoning standards and may occur provided that the construction is within the above criteria."

"Alteration: a modification to a building which does not change the footprint or floor area of an existing building, and which is not a repair."

"Family: An individual, or two (2) or more persons related by blood or marriage, or a group of not more than five (5) persons (excluding servants) not related by blood or marriage, living together as a single housekeeping group in a dwelling unit."

"New Construction: any change to an existing building which exceeds the definition of an Alteration or Addition as defined herein. Construction meeting

the definition of 'New Construction' will require a Single Family Dwelling (SFD) permit.)"

"Townhouse: Townhouse is a single-family dwelling unit constructed in a single or double row of attached units, where each unit has an independent means of egress."

"Townhouse Loft: An additional story in one-family townhouses contained between the roof eaves and ridge which may contain habitable rooms and does not exceed sixty percent (60%) of the floor area below."

Table No. R-301.2(1) of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

Table No. R-301.2(1)

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

			Subject to Damage From								
P.S.F. Ground Snow Load	Wind Speed (mph)	Seismic Design Category	Weathering	Frost line depth	Termite	Decay	Winter Design Temp	Ice Shield Under-Layment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
25	90	B	Severe	24"	Moderate to Heavy	Slight to Moderate	13° F	No	Yes	1,000	50°

Table No. R-301.5 of the IRC for One and Two Family Dwellings, 2003 Edition, is amended by amending the minimum uniformly distributed live load for decks to 60 pounds per square inch.

Section R-305 (Exceptions No. 2 and 3) of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"Section R-305--Ceiling Height

Exceptions:

2. Ceiling height in basements without habitable spaces may be not less than six (6) feet eight (8) inches clear except for under beams, girders, ducts or other obstructions where the clear height shall be six (6) feet four (4) inches. Unfinished basements which meet the requirements for habitable spaces shall meet the ceiling height requirement for habitable rooms. Basements constructed prior to September

26, 1995 may have a ceiling height of 7'0" in habitable spaces except sleeping rooms.

3. Not more than 50 percent of the floor area of a room or space is permitted to have a sloped ceiling less than 7 feet in height. Any floor area having less than 5 feet of ceiling height shall not be considered part of the room area and shall not be allowed to have any permanent fixtures or furnishings such as, but not limited to, bathtubs, showers, water closets, sinks, cabinets, or counters."

Section R-306.3 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-306.3. Sewage disposal. All plumbing fixtures shall be connected to a sanitary sewer."

Sections R-309.1, R-309.2, R-309.3 and R-309.4 of the IRC for One and Two Family Dwellings, 2003 Edition are amended as follows:

"R-309.1 Opening protection: Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with either solid wood doors not less than one and three-quarter (1 3/4) inches in thickness, or twenty-minute fire-rated doors or equivalent. All doors must be equipped with self-closing devices. Doors between the garage and dwelling unit in a townhouse with loft totaling four floors must be self-closing and self-latching.

R-309.2 Separation required: The garage shall be completely separated from the residence and its attic area by means of 1/2 inch Type X gypsum board, or equivalent, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch (15.9 mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 1/2 –inch (12.7mm) gypsum board or equivalent. The garage in a townhouse with loft totaling four floors, must be separated from the rest of the dwelling by one hour fire resistance rated assemblies supported by at least one-hour fire protected construction.

R-309.3 Floor surface: Garage floor surfaces shall be of approved noncombustible material. The garage floor must be at least four inches below an adjacent dwelling floor or a permanent noncombustible liquid tight curb at least four inches high must be installed on the garage side. The floor must be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry door."

R-309.4 Carports. Exception is deleted.

Section R-310.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended by adding the following:

> "Exception: Buildings equipped throughout with an approved complete fire suppression (sprinkler) system.
>
> Habitable rooms in a townhouse loft shall comply with the requirements for an emergency escape and rescue opening with no exception for sprinklering."

Section R-311.2.2 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

> "R-311.2.2 Under stair Protection. Enclosed accessible space under stairs shall have walls and soffits protected on the enclosed side with 1/2" type X gypsum board.
>
> Exception: Buildings equipped throughout with a complete fire suppression (sprinkler) system."

Section R-311.4 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

> "R-311.4.1 Exit door required. Not less than one exit door conforming to this chapter shall be provided from each dwelling unit. The required exit door shall provide for direct access from the habitable portions of the dwelling to the exterior without requiring travel through a garage. Exit access from a townhouse loft to the exit door must not require vertical travel of more than two stories. Access to habitable levels not having an exit in accordance with this section shall be by a ramp in accordance with Section. R-311.6 or a stairway in accordance with Section R-311.5."

Section R-311.4.2 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

> "R-311.4.2. Door type and size. The required exit door shall be a side-hinged door not less than three feet in width and 6 feet 8 inches in height. Other exterior hinged or sliding doors shall not be required to comply with these minimum dimensions. The minimum width of a hallway or exit access shall be not less than three feet."

Sections R-311.5.3.1 and R-311.5.3.2 of the IRC for One and Two Family Dwellings, 2003 Edition are amended as follows:

> "R-311.5.3.1. Riser height. The maximum riser height shall be 8-1/4 inches (210 mm). The riser shall be measured vertically between leading edges of the

adjacent treads. The greatest riser height within any flight of stairs shall not exeed the smallest by more than 3/8 inch (9.5 mm).

R-311.5.3.2 Tread depth. The minimum tread depth shall be 9 inches (299 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder treads shall have a minimum tread depth of 9 inches (299 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12 inch (305 mm) walk line shall not exceed the smallest by more than 38 inch (9.5 mm)."

Section R-311.5.8.3 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-311.5.8.3. Circular stairways. Circular stairways shall have a minimum tread width and maximum riser height in accordance with Sections R-311.5.3.1 and 311.5.3.2 and the smallest radius shall not be less than twice the width of the stairway. The minimum tread depth of 9 inches shall be measured from the narrower end."

Section R-312.1 and R-312.2 of the IRC for One and Two Family Dwellings, 2003 Edition, are amended to read as follows:

"R-312.1 Guardrails: Porches, balconies or raised floor surfaces located more than thirty (30) inches above the floor or grade below and retaining walls with a difference in grade level on either side of the wall exceeding 4 feet and within 2 feet of a walk, path, parking lot or driveway on the high side shall have guardrails not less than thirty-six (36) inches in height. Porches and decks which are enclosed with insect screening shall be provided with guards where the walking surface is located more than 30 inches (762 mm) above the floor or grade below.

Open sides of stairs with a total rise of more than thirty (30) inches above the floor or grade below shall have a guardrail not less than thirty-four (34) inches in height measured vertically from the nosing of the treads."

"R-312.2. Guard opening limitations. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches (102 mm) in diameter. Required guards shall not be constructed with horizontal rails or other ornamental pattern that results in a ladder effect.

Exception: The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches (152 mm) cannot pass through."

Section R-313.1 of the IRC for One and Two Family Dwellings, 2003 Edition, is amended by adding #4 as follows:

"R-313.1 Single- and multiple-station smoke alarms. Single and multiple-station smoke alarms shall be installed in the following locations:

4. In each townhouse loft."

Section R-317.1 "Two Family Dwellings" of the IRC for One and Two Family Dwellings, 2003 Edition is amended by deleting the exception.

A new Section R-324 is added to the IRC for One and Two Family Dwellings, 2003 Edition to read as follows:

"Section R-324. Fire Suppression Systems

R-324.1 Automatic Fire Suppression Systems Required: Complete fire suppression systems shall be installed and maintained in full operating condition, in compliance with the applicable NFPA Fire Code in all attached or detached single family dwellings and townhouses for which building permit applications for new construction, as defined herein, have been submitted to the City of Rockville after September 23, 2002.

Exceptions:
1. Bathrooms to fifty-five (55) square feet in area.
2. Storage rooms (not including rooms with furnaces or gas-fired equipment) whose area does not exceed twenty-four (24) square feet and whose least dimension does not exceed three (3) feet;
3. Workshop rooms less than twenty-four (24) square feet in area."

Section R-401.4.1 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Sections R-403.1 and R-403.1.8 of the IRC for One and Two Family Dwellings, 2003 Edition are amended as follows:

"R-403.1 General. All exterior walls, bearing walls, columns and piers shall be supported on continuous solid masonry or concrete footings, wood foundations, or other approved structural systems, which shall be of sufficient design to support

safely the loads imposed as determined from the character of the soil, and except when erected upon solid rock or otherwise protected from frost, shall extend below the frost line. Minimum concrete compressive strength shall be 2,000 psi. at 28 days. When existing carports and other unenclosed areas are enclosed with walls, continuous footings meeting the requirements of this section must be provided for all exposed slab sides. Accessory buildings over one hundred forty-four (144) square feet in area must be supported on continuous footings meeting the requirements of this section. Minimum sizes for concrete footings shall be as set forth in Table No. 403.1 and Figure 403.1(1). Footings for wood foundations shall be in accordance with the details set forth in Figure Nos. 403.1(2) and 403.1(3)."

R-403.1.8 Foundations on expansive soils. Delete the exception.

Section R-404.1.6 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-404.1.6 Height above finished grade. Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of 4 inches where masonry veneer is used and a minimum of eight inches elsewhere."

Section R-406.1 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section R-406.2 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-406.2 Concrete and masonry foundation water proofing. Exterior foundation walls enclosing habitable, usable, or storage space shall be waterproofed with a membrane extending from the top of the footing to the finished grade. The membrane shall consist of 2-ply hot mopped felts, 55-lb roll roofing, 6-mil polyvinyl chloride, 6-mil polyethylene or 40-mil polyner-modified asphalt. The joints in the membrane shall be lapped and sealed with an adhesive compatible with the waterproofing membrane. An engineered waterproofing design may be required by the building official in areas where soil reports would warrant such design."

Section R-406.2.1 is added to the IRC for One and Two Family Dwellings, 2003 Edition as follows:

"R-406.2.1. Crawlspace dampproofing. Exterior foundation walls of concrete construction enclosing crawlspaces without finished floors shall be dampproofed by applying a coat of approved bituminous material to the wall from the footing to the finish grade at the recommended rate. Exterior foundation walls of masonry

construction enclosing crawlspaces with finished floors must be made waterproof with membranes extending from the edge of the footing to the finished grade line. The membrane shall consist of either 2-ply hot-mopped felts, 6-mil polyvinyl chloride, 55-pound roll roofing or equivalent material. The laps in the waterproofing membrane shall be sealed and firmly affixed to the wall."

Section R-408.2 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"R-408.2. Openings for underfloor ventilation. The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929 m^2) for each 150 square feet (100 m^2) of underfloor space area. One such ventilating opening shall be within 3 feet (914 mm) of each corner of the building. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed ¼ inch (6.4 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2 Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast iron grills or grating.
4. Extruded load-bearing brick vents.
5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension being 1/8 inch (3.2 mm).

Exceptions:

1. This exception is deleted.

2. The total area of ventilation openings may be reduced to 1/1,500 of the under-floor area where the ground surface is treated with an approved vapor retarder material and the required openings are placed so as to provide cross-ventilation of the space.

3. Under-floor spaces used as supply plenums for distribution of heated and cooled air shall comply with the requirements of Section M1601.4.

4. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of 1.0 cfm (10m^2) for each 50 square feet (1.02L/s) of underfloor space floor area and ground surface is covered with an approved vapor retarder material.

5. Ventilation openings are not required when the ground surface is covered with an approved vapor retarder material, the space is supplied with conditioned air and the perimeter walls are insulated in accordance with Section N1102.1.7."

Section R-506.2.3 is amended by deleting Exception No. 3.

A new Section R-507 is added to the IRC for One and Two Family Dwellings, 2003 Edition as follows:

"Section R-507 - Wood Decks

R-507.1 General: Construction of wood decks shall conform to the following requirements, in addition to other applicable requirements of this Chapter. In the case of unusual or complex design, the stamp of a Maryland registered architect or engineer may be required.

R-507.2 Live Load: The minimum uniformly distributed live load for wood frame decks shall be sixty (60) psf.

R-507.3 Footings: The minimum footing size shall be sixteen (16) inches, by eight (8) inches in depth, with the bottom of the footing a minimum of twenty-four (24) inches below grade. Increased size or load factors may require a larger footing as determined by the code official.

R-507.4 Posts: Four (4) x four (4) posts may be used for decks under ten (10) feet above grade. A minimum post size of six (6) x six (6) must be used for decks ten (10) feet or more above grade.

R-507.5 Attachment: Decks may be attached to structures by the use of ledger boards bolted to solid dimension lumber, using one-half-inch diameter bolts at not more than sixteen (16) inch intervals. Ledger boards may not be attached directly to plywood, nondimensional bands, or truss joists. Deck structures may not be attached to building cantilevers or to chimneys.

R-507.6 Joist Hangers: Joist hangers shall be secured in accordance with the manufacturer's recommendations, including use of special nail type. Manufacturer's recommendations must be on the jobsite for review by the inspector.

R-507.7 Cantilevers: Cantilevers shall be limited to a maximum of one-third (1/3) of the adjacent clear span, designed in accordance with standard engineering practices.

R-507.8 Flooring: 5/4 decking shall be limited to a maximum joist spacing of sixteen (16) inches. Two (2) x four (4) and larger decking shall be limited to a joist spacing of not more than twenty-four (24) inches.

R-507.9 Stairs: Stairs shall be constructed using stringers every eighteen (18) inches. The maximum riser height shall be eight and one-quarter (8 1/4) inches,

and minimum tread depth shall be nine (9) inches. The greatest riser height within any flight of stairs shall not exceed the smallest by more than three-eighths (3/8) inch. The greatest tread run within any flight of stairs shall not exceed the smallest by more than three-eighths (3/8) inch. When risers are closed, all treads may have a uniform projection not to exceed one and one-half (1 1/2) inches.

R-507.10 Handrails: Handrails meeting the requirements of R-311.5.6 shall be installed for all stairs with two (2) or more risers.

Handrail posts shall be attached using a minimum of two (2) one-half (1/2") inch diameter bolts per post.

R-507.11 Guardrails: Deck floor surfaces located more than thirty (30) inches above the floor or grade below shall have guardrails meeting the requirements of Section R-312. The use of wood lattice in lieu of intermediate pickets or rails is prohibited. Guards shall not include ornamental features which present a climbing hazard.

R-507.12 Materials: All fasteners, hangers, postchairs and other hardware shall be of the type recommended for the preservative wood used. Manufacturer information shall be provided on-site for the inspector."

Section N-1101.1 of the IRC for One and Two Family Dwellings, 2003 Edition, is amended as follows:

"N-1101.1. Scope. This chapter sets forth energy-efficiency-related requirements for the design and construction of buildings regulated by this code.

Exceptions:

1. Portions of the building thermal envelope that do not enclose conditioned space.
2. One-story additions of 200 square feet or less."

Section P-2601.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended to add the following:

"Plumbing materials and installation shall conform to the requirements of Chapters 25 through 32 of this Code, and to the requirements of Chapter 5, Article XI, Plumbing Code, of the Rockville City Code. Where there are conflicts between the two codes, the requirements of the Rockville City Code shall prevail. The drainage waste and vent (DWV) system shall consist of all piping for conveying wastes from plumbing fixtures, appliances and appurtenances, including fixture traps; above-grade drainage piping; below-grade drains within the building (building drain); below and above-grade venting systems, and piping

to the public sewer system. No portion of the above-grade DWV system other than vent terminals shall be located outdoors."

Section P-2602 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section P-2705.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"Section P-2705.1. General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, when so designed, by screws, bolts, washers, nuts and similar fasteners of copper, brass or other corrosion-resistant material.

2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.

3. Where fixtures come in contact with walls and floors, the contact area shall be water tight.

4. Plumbing fixtures shall be functionally accessible.

5. The center line of water closets or bidets shall not be less than 15 inches (381 mm) from adjacent walls or partitions or not less than 30 inches (762 mm) center to center from an adjacent water closet or bidet. There shall be at least 21 inches (533 mm) clearance in front of the water closet, bidet or lavatory to any wall, fixture or door.

6. The location of piping or equipment shall not interfere with the operation of windows or doors.

7. Valves or stops shall be installed in an accessible location for each plumbing fixture to interrupt water supply to the fixture."

Section P-2903.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended by adding the following sentence:

"Minimum flow rate required by Table P-2903.1 will be confirmed with fixutre faucet/fitting in full open position, at time of final inspection."

Section P-2903.3 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

P-2903.3 Minimum pressure. Minimum static pressure (as determined by the local water authority) at the building entrance for either public or private water

service shall be 40 psi (276 kPa). Certification of pressure is required for new construction.

Section P-2903.7 of the IRC for One and Two Family Dwellings, 2003 Edition is amended to substitute 1-inch minimum pipe size for 3/4 inch minimum pipe size and to add the following sentence to the end of the paragraph:

"Installation of additional fixtures at an existing building will require evaluation of the size of the water distribution system, as outlined in this section, and an increase in line and meter size if required by the additional fixture demand."

Section P-2904.4 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"P-2904.4 Water service pipe. Water service pipe installed underground between the main and the property line and from the property line to the structure to be supplied shall be type "K" copper tubing with sillflox/brazed joints only for sizes up to and including two (2) inches. In case type "K" copper tubing is unavailable, type "L" copper tubing may be used in an emergency when authorized by the City. Water service pipe installed underground and outside of the structure, shall have a minimum working pressure rating of 160 psi at 73°F (1100 kPa at 23°C)."

Table 2904.4.1 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section P-2904.4.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"P-2904.4.1 Water service installation. Trenching, pipe installation and backfilling shall be in conformance with Section P-2604.

Sewers and water servicing pipe shall be installed below the recorded frost penetration, but in no case less than two (2) feet two (2) inches for sewer and two (2) feet six (6) inches for water piping below grade. Water-service pipes may be laid in the same trench with a building sewer, when the water-service pipe is placed on a solid ledge at least twelve (12) inches above and twelve (12) inches to one (1) side of the highest point in the sewer line. In no case shall the water-service pipe be less than two (2) feet six (6) inches below grade."

Section P-2904.3 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section P-2904.5.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"Section P-2904.5.1 - Under Concrete Slabs

Inaccessible water-distribution piping under slabs shall be copper water tube Type M, brass, or cast-iron pressure pipe, all installed with approved fittings or bends.

Any material subject to corrosion shall be protected when used in corrosive soils. Joints in copper pipe or tube installed in a concrete floor slab or under a concrete floor slab on grade shall be installed using wrought-copper fittings and brazed joints."

Section P-2904.14 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Section P-3001.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

"Section P-3001.1 Scope. The provisions of this chapter shall govern the materials, design, construction and installation of sanitary drainage systems. Plumbing materials shall conform to the requirements of this chapter. The drainage waste and vent (DWV) system shall consist of all piping for conveying wastes from plumbing fixtures, appliances and appurtenances, including fixture traps; above-grade drainage piping; below-grade drains within the building (building drain); below-and above-grade venting systems; and piping to the public sewer system."

Section E-3301.1 of the IRC for One and Two Family Dwellings, 2003 Edition is amended to add the following:

"The electrical requirements shall conform to the most recently adopted edition of the NFIPA National Electrical Code as provided for in Chapter 5 of the Rockville City Code."

Chapter 33 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 34 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 35 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 36 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 37 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 38 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 39 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 40 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 41 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Chapter 42 of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix A of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix B of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix C of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix D of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix E of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix G of the IRC for One and Two Family Dwellings, 2003 Edition is amended as follows:

Section AG-105.2 Outdoor swimming pool. Subsection 1 and 6 are amended as follows:

"1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

6. Maximum mesh size for chain link fences shall be a 1.25 inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches."

Subsection 9.2 is amended to read as follows:

"9.2. All doors with direct access to the pool through that wall must be equipped with an alarm that produces an audible warning when the door and its screen are opened. The alarm must be audible throughout the house during normal household activities. The alarm system may be equipped with a manual means to temporarily deactivate the system for a single opening. The deactivation switch(es) must be located at least 54 inches above the threshold of the door."

Subsection 9.3 is deleted.

Appendix I of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

Appendix J of the IRC for One and Two Family Dwellings, 2003 Edition is deleted.

NOTE: [Brackets] indicate material deleted in SECTION 1.
<u>Underlining</u> indicates material added in SECTION 1.

* *

I hereby certify that the foregoing is a true and correct copy of an ordinance adopted by the Mayor and Council at its meeting of

_____
Claire F. Funkhouser, CMC, City Clerk

City of Rockville

MEMORANDUM

October 25, 2004

TO: Catherine Tuck-Parrish, Acting City Manager

FROM: Linda Mac Dermid, Chief of Inspection Services

VIA: Arthur D. Chambers, Director, Community Planning & Development Services

SUBJECT: Introduction and Adoption of 2003 International Residential Code for One and Two Family Dwellings, and Amendments

The Mayor and Council will have the opportunity to introduce and adopt the 2003 edition of the International Code Council's International Residential Code for One and Two Family Dwellings (IRC) at their meeting on November 1, 2004. The State of Maryland has adopted this code and obligated its political subdivisions to enforce it throughout the state. The IRC applies to the construction, alteration, addition, repair, removal, use, location, and occupancy of all detached one- and two-family dwellings, and multiple single family dwellings (townhouses) not more than three stories in height, with separate means of egress. We are proposing amendments which, for the most part, are consistent with those which have been in effect in Rockville for many years.

As you know, the adoption of the 2000 edition of the International Residential Code by the Mayor and Council in September 2003 included an amendment requiring the sprinklering of all new single family dwellings (detached). The amendments currently being considered for introduction and adoption continue that requirement, and also add definitions which help to clarify when sprinklering is required. Added are definitions of "Addition", "Alteration", and "New Construction", as follows:

- ***Addition:*** A modification to an existing building which changes the footprint or floor area, provided that:
  - The construction must not, at time of application, exceed the existing footprint by more than 100%;
  - At least 50% of the existing first floor exterior walls, in their entirety (measured in linear feet) and comprising the footprint of the existing building, must remain as exterior walls. The determination of first floor exterior walls is those which have the finished floor surface entirely above grade;
  - Any increase in building height is subject to current zoning standards and may occur provided that the construction is within the above criteria.

- ***Alteration:*** A modification to a building which does not change the footprint or floor area of an existing building, and which is not a repair.

- ***New Construction:*** Any change to an existing building which exceeds the definition of an Alteration or Addition as defined herein. Construction meeting the definition of "New Construction" will require a Single Family Dwelling (SFD) permit.

Alterations and additions, meeting those definitions, will not require sprinklering. Beyond those definitions, the construction will be considered to be new, and will require that the dwelling be sprinklered during construction. We have experienced several situations where permits were obtained for interior dwelling renovation and construction of sizable additions, only to find that the contractor removed the dwelling to the foundation level and expected not to comply with the requirements for construction of a new single family dwelling. These definitions will remove any ambiguity with respect to what scope of construction constitutes "new construction". The sprinklering amendment (Section R-324) has also been changed to reference the definition of new construction in its requirement.

The remaining amendments address section numbering changes, and other housekeeping concerns, and do not depart from requirements which have been in effect in Rockville for several code cycles.