

VILLAGE OF DOWNERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Fire Prevention **DATE:** March 6, 2001
(Name)

RECOMMENDATION FROM: _____ **FILE REF:** _____
(Board or Department)

NATURE OF ACTION:

STEPS NEEDED TO IMPLEMENT ACTION:

- Ordinance
- Resolution
- Motion
- Other

Motion to Adopt "AN ORDINANCE AMENDING CERTAIN PROVISIONS OF THE FIRE PREVENTION CODE", as presented.

SUMMARY OF ITEM:

Adoption of this ordinance will clarify certain provisions of the Municipal Code pertaining to the requirements for automatic sprinkler systems.

RECORD OF ACTION TAKEN:

ORDINANCE NO. _____

**AN ORDINANCE AMENDING CERTAIN PROVISIONS
OF THE FIRE PREVENTION CODE**

BE IT ORDAINED by the Council of the Village of Downers Grove, in DuPage County, Illinois, as follows: (Additions are indicated by shading; deletions by ~~strikeout~~.)

SECTION 1. That Section 17-45 of the Downers Grove Municipal Code is hereby amended as follows:

17-45. Same—Amendments.

The deletions from and modifications and amendments to the Fire Prevention Code are as follows:

(a) Section F-107.2.3 and Table F-107.2.3 are deleted in their entirety.
(b) Section F-112.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-112.3 Penalty for violations. Any person, firm or corporation violating any of the provisions of the code or failing to comply with any order issued pursuant to any section thereof shall be guilty of a petty offense, and upon conviction thereof shall be punished as provided in Section 1-15 of the Downers Grove Municipal Code. Each day that a violation continues, after a service of notice as provided for in this Code, shall be deemed a separate offense.

(c) Section F-113.0 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-113.0 Appeal procedures. Any person aggrieved by any decision or interpretation of the fire official made under the provisions of this Code may take an appeal to the Building Board of Appeals in accordance with the procedures prescribed in Section 7-9 herein.

(d) Section F-303.0 is amended by adding the following section:

F-303.1.1 Marking of Assemblies. Where fire rated assemblies are installed, they shall be marked at a minimum spacing of 20 feet with appropriate labeling as approved by the authority having jurisdiction. Markings shall include the hour rating of the assembly present. Areas where penetrations in these assemblies are made shall have a label adjacent to the opening protective installed. Labels may be placed above drop ceilings and under carpeting as necessary. Labels shall be of contrasting color and lettering shall be of at least 1/2" in size, legible from the floor level where installed.

(e) Sections F-311.1 and F-311.2 are amended by deleting the same in their entirety and by substituting in lieu thereof the following:

F-311.1 Fire lanes on private property used by the public.

a. For private property used by the public such as schools, hospitals, churches, shopping centers, apartment complexes, office complexes, theaters, bowling alleys and similar facilities, fire lanes shall be established and designated in the locations deemed necessary by the code official. The owner or occupant of the property shall execute an agreement with the Village allowing the Village to enforce the fire lane restrictions by issuing parking tickets for vehicles illegally parked in fire lanes designated under this section. The Village Manager is authorized on behalf of the Village Council to execute agreements with property owners, lessees or managers for the enforcement of fire lane restrictions on private property. Such agreement shall be signed prior to issuance of any applicable building permits for the property.

b. Fire lanes may be established and designated on property as aforesaid where the

parking of motor vehicles or other obstructions may interfere with the ingress and egress of Fire Department vehicles for the protection of persons and property.

c. Fire lanes designated for newly developed areas of public use shall meet the following requirements:

- (1) A fire lane shall be a thoroughfare a minimum of 18 feet wide;
- (2) A fire lane shall be accessible from a public street or a public way;
- (3) A fire lane shall be located a minimum of 10 feet from a building, as measured from the outer wall of such building;
- (4) A fire lane shall be located so that a minimum 13 feet 6 inches of unobstructed height over the pavement is preserved; or such fire lanes shall meet such other requirements as the fire official may determine in his discretion to be substantially equivalent to the above requirements and sufficient for the protection of the public safety and welfare.

F-311.2 Signage and obstructions.

a. Fire lanes designated pursuant to this section shall be posted by the owner of the property with signs reading substantially as follows: "No Parking Fire Lane."

b. Fire lanes designated pursuant to this section shall be kept accessible to the Fire Department. Parking of motor vehicles or otherwise obstructing such fire lanes shall be prohibited at all times.

(f) Section F-315.0 is amended by adding the following section:

F-315.1.1 Restriction of combustible materials. Where required by the code official, no combustible construction materials or packaging shall be stored inside the building or structure until the sprinkler system is activated. Where deemed necessary by the code official, the activated sprinkler system shall be supervised by a temporary connection to the Village's fire alarm receiving equipment.

(g) Section F-403.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-403.3 Allowable burning. Open burning shall be allowed without prior notification to the code official for recreational fires and highway safety flares only.

(h) Section F-403.4 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-403.4 Permit required. Open burning shall be allowed only as permitted in Section 13-35 of the Downers Grove Municipal Code and only after obtaining a permit from the code official for such open burning.

(i) Section F-501.2 is hereby amended by deleting the words "building code official" and substituting in lieu thereof the words "code official."

(j) Section F-501.2.1 is amended by adding the following language at the conclusion thereof:
"and the Village Alarm Code in Chapter 17, Article VI of the Downers Grove Municipal Code."

(k) Section F-501.0 is amended by adding the following section:

F-501.2.2 Fire pump emergency power. Any fire pump installed to meet the hydraulic design needs of an automatic fire sprinkler system shall be connected to an automatically switched emergency power generator to assure operation at all times. The emergency power generator, all switching equipment, and the connection to the fire pump shall meet all requirements of the National Electrical Code (NFPA 70) as adopted by the Village.

(l) Section F-501.4 is amended by adding the following language at the conclusion thereof:
"or as specified in the Village Alarm Code in Section 17, Article VI, of the Downers Grove Municipal Code, whichever is more often."

(m) Section F-501.0 is amended by adding the following sections:

F-501.7 Resetting fire alarm systems. Upon activation of a fire alarm system, the system shall not be reset (restored to a secured or clear condition) by any person until Fire Department personnel are on the scene and direct the system to be reset.

F-501.8 Silencing fire alarm systems. Upon activation of a fire alarm system, the system shall not be silenced (alarm devices shut off) by any person until Fire Department personnel are on the scene and direct the system to be silenced.

F-501.9 Primary System Flow Switches. Where all components of a sprinkler system are individually controlled and send independent zoned alarms. Any main flow switches, pump running and other associated primary water flow indicators shall be connected to a supervisory zone. The primary flow indicator will be tied to the external (24 VDC) device which will be non-silenceable as required by NFPA 72 for indication of water flow.

Exception: All devices will be connected in accordance with the requirements as indicated, modification and application of this Code section is subject to the authority having jurisdiction.

(n) Section F-502.1 is amended by adding the following paragraph:

Significant remodeling. When the cost of the remodeling or reconstruction exceeds thirty five (35%) of the reconstruction costs of the building or structure exclusive of land and furnishings. Reconstruction costs shall be determined by the Code Official based upon the latest B.O.C.A. Building Construction Statistics report. Provided, the applicant, at the applicant's expense, may submit a written report prepared by a licensed architect or certified appraiser setting forth an opinion of the reconstruction costs. In such event, the Code Official shall consider such report, in addition to the B.O.C.A. Building Construction Statistics report in arriving at a determination of the reconstruction costs.

(o) Section F-503.3 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-503.3 Fire standpipes. All buildings three or more stories in height and all buildings in which the floor level of the lowest story is located more than thirty feet below the highest level of Fire Department vehicle access shall have standpipe systems installed throughout in accordance with the Downers Grove Building Code. The standpipes shall have an approved Fire Department connection with hose connections at each floor level.

(p) Section F-503.4.2 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-503.4.2 Power source. The power source for smoke detectors shall be an AC primary source with a battery backup power source. Exception: Smoke detectors powered by DC power from a fire alarm control panel and such panel being (primary) powered by AC power are acceptable if the system is connected to the Village's fire alarm receiving equipment in accordance with the provisions of Chapter 17, Article VI, of the Downers Grove Municipal Code.

(q) Section F-503.5 is amended by deleting the same in its entirety and by substituting in lieu thereof the following:

F-503.5 Fire protective signaling system. The following shall be equipped with an electrically supervised fire protective signaling system connected to the Village's fire alarm receiving equipment in accordance with the provisions of Chapter 17, Article VI of the Downers Grove Municipal Code:

(1) All buildings or structures equipped with a fire suppression system, fire sprinkler system or fire detection system;

(2) All buildings of Use Groups A-4, E, I-1, I-2, I-3; and

(3) Any other building required by any code or ordinance to be equipped with a fire alarm, fire detection or fire suppression system.

Each fire protective signaling system shall be equipped with audio/visual fire alarm warning devices located so as to be seen, and heard effectively above all other sounds, by all occupants in every occupiable space within the building. The sound level of alarm devices shall be at least 15 dBA above the ambient sound level or 5 dBA above the maximum sound level having a duration of at least sixty seconds, whichever is greater, such levels to be measured five feet above the floor level in the occupiable area.

(r) Section F-503.0 is hereby amended by adding the following sections:

F-503.7 Fire detection system. All buildings or structures of Use Groups A-4, E, I-1, I-2, I-3 and R-1, shall be protected throughout all spaces by an approved supervised fire detection and fire protective

signaling system connected to the Village's fire alarm receiving equipment in accordance with the provisions of Chapter 17, Article VI of the Downers Grove Municipal Code, unless such building or structure is fully protected by an approved supervised fire sprinkler system. Each fire protective signalling system shall be equipped with audio/visual fire alarm warning devices located so as to be seen, and heard effectively above all other sounds, by all occupants in every occupiable space within the building. The sound level of the alarm devices shall be at least 15 dBA above the ambient sound level or 5 dBA above the maximum sound level having a duration of at least sixty seconds, whichever is greater, such levels to be measured five feet above the floor level in the occupiable area.

F-503.7.1 Fire detection system: All buildings or structures of Use Groups A-2, A-3, B, F, H, M, R-2, S-1, and S-2, which are located within the concentrated business district (as defined in the Comprehensive Zoning Ordinance) and are required to have a certain degree of separation between floors, paths of exit access, occupancy or uses, shall be permitted to substitute a complete fire detection and fire protective signaling system installed throughout the building for the required degree of separation if in the opinion of the code official such separation is impractical. The fire detection and fire protective signaling system shall be connected to the Village's fire alarm receiving equipment in accordance with the provisions of Chapter 17, Article VI of the Downers Grove Municipal Code and the Building Code. Each fire protective signaling system shall be equipped with audio/visual fire alarm warning devices located so as to be seen, and heard effectively above all other sounds, by all occupants in every occupiable space within the building. The sound level of alarm devices shall be at least 15 dBA above the ambient sound level or 5 dBA above the maximum sound level having a duration of at least sixty seconds, whichever is greater, such levels to be measured five feet above the floor level in the occupiable area.

F-503.7.2 Fire detection system. All buildings or structures containing a residential use and any other occupancy that is not a residential use shall have a complete fire detection and fire protective signaling system installed throughout the building. The fire detection and fire protective signaling system shall be connected to the Village's fire alarm receiving equipment in accordance with the provisions of Chapter 17, Article VI of the Downers Grove Municipal Code. Each fire protective signaling system shall be equipped with audio/visual fire alarm warning devices located so as to be seen, and heard effectively above all other sounds, by all occupants in every occupiable space within the building. The sound level of alarm devices shall be at least 15 dBA above the ambient sound level or 5 dBA above the maximum sound level having a duration of at least sixty seconds, whichever is greater, such levels to be measured five feet above the floor level in the occupiable area.

F-503.8 Automatic sprinkler system. Chapter 34 of the 1996 BOCA Building Code shall not take precedence over any fire protection or life safety system requirements of this ordinance. Any existing building or structure which exceeds the maximum area or height limits of the Downers Grove Building Code, Section 904.1, shall be equipped with an electrically supervised automatic fire suppression sprinkler system and fire protective signaling system throughout the building in accordance with the provisions of Chapter 17, Article VI of the Downers Grove Municipal Code and the Building Code if:

(1) The building or structure undergoes any significant remodeling, addition of usable floor space, or change of actual use which increases the hazard level in the building in any manner; ~~or. Any existing building or structure not exceeding the maximum area limits of Section 904.1 that undergoes an addition of usable floor space, the addition area shall be added to the existing building area so as to determine the maximum area limits for the installation of a complete sprinkler system in the existing building or structure and the addition thereof; or~~

(2) The building or structure undergoes a change to a more restrictive use.

Each fire protective signaling system shall be equipped with audio/visual fire alarm warning devices located so as to be seen, and heard effectively above all other sounds, by all occupants in every occupiable space within the building. The sound level of alarm devices shall be at least 15 dBA above the ambient sound level or 5 dBA above the maximum sound level having a duration of at least sixty seconds, whichever is greater, such levels to be measured five feet above the floor level in the occupiable area.

F-503.9 Dry sprinkler system. All dry pipe systems shall have a dryer on the air compressor

to minimize moisture within the system piping.

F-503.10 Fire pump emergency power. Any fire pump installed to meet the hydraulic design needs of an automatic fire sprinkler system shall be connected to an automatically switched emergency power generator to assure operation at all times. The emergency power generator, all switching equipment, and the connection to the fire pump shall meet all requirements of the National Electric Code (NFPA 70) as adopted by the Village.

F-503.11 Backflow prevention. Whenever a backflow prevention device is required to be installed on an existing hydraulically calculated sprinkler system, the system shall be recalculated to assure that the design density of the sprinkler system is satisfied. Should the design density be inadequate, the automatic sprinkler system shall be redesigned for compliance with the required design density.

F-503.12 Backflow prevention - antifreeze systems. Wherever an existing antifreeze sprinkler system is not protected by a reduced pressure backflow prevention device, the system shall be altered to incorporate a reduced pressure backflow prevention device at the point of connection to that section of the system containing such additives.

(s) Section F-504.3 is amended by deleting the exception therein in its entirety and by adding the following language at the end of the first sentence: "and shall continue to be periodically tested pursuant to Chapter 17, Article VI of the Downers Grove Municipal Code. Before any reoccupancy, a test of the system shall be witnessed by the code official."

(t) Section F-513.1 is amended by adding immediately at the conclusion thereof the following: "and as specified in the Alarm Code in Chapter 17, Article VI of the Downers Grove Municipal Code.

(u) Section F-513.2 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

F-513.2 Testing. Complete and satisfactory tests shall be performed on all devices in accordance with Chapter 17, Article VI of the Downers Grove Municipal Code.

(v) Section F-513.2.1 is deleted in its entirety.

(w) Section F-514.1 is amended by adding immediately at the conclusion thereof the following: "and as specified in the Alarm Code in Chapter 17, Article VI of the Downers Grove Municipal Code."

(x) Section F-518.0 is amended by adding the following section:

Section F-518.5 Fire Department Connections. The fire department connections shall be five inch storz type connectors compatible with the hose couplings currently used by the local fire department and connected to the riser by means of a five inch or larger piping system.

High rise structures shall carry a five inch storz to two - 2 1/2 inch siamese adapter as part of the standard tool kit required under Section 403.7 of the BOCA Building Code.

Exception: A fire department connection having the standard internal threaded swivel fittings of 2 1/2 inches NST may be substituted for the five inch storz connection with the approval of the authority having jurisdiction where system pressures may exceed hose test pressure or water supply could require an extensive hose lay to the structure.

(y) Section F-519.2 is amended by deleting Section 519.2(1) therein in its entirety and substituting in lieu thereof the following: "1. In all buildings of Use Groups A-1, A-2, A-3, A-4, A-5, B, E, F-1, F-2, H-1, H-2, H-3, H-4, I-1, I-2, I-3, M, R-1, R-2, R-3 if containing a child care facility, S-1, S-2 and U." and by adding the following to the end of Section 519-2(2):

2...An extinguisher of a type appropriate to the hazard present (Class K) shall be installed. Wet chemical extinguishers are acceptable and desirable where a fryer application is present.

(z) Section F-605.0 is amended by adding the following section:

F-605.1.1 Check out lanes. At no time shall check-out lanes be blocked by stored carts, displays, chains or other fixed obstructions to free access.

(aa) Section F-610.0 is hereby amended by adding the following section:

F-610.1.1 Emergency lighting. Where emergency lighting units are required by Village ordinance or regulation, twenty percent (20%) of those lights must have battery power if the building or structure has an emergency generator for such lighting. For multi-story buildings, stairs shall at a minimum

have a battery powered unit at every fourth landing. These battery powered units on the stairs can be applied toward the twenty percent (20%) requirement.

(bb) Section F-3201.2 is amended by adding the words: "or waste oils" after the words "combustible liquids" wherever they appear therein.

(cc) Section F-3207.1 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

F-3207.1 General. Combustible liquid storage tanks of any capacity installed above ground shall comply with this chapter. Flammable liquids shall not be stored above ground.

(dd) Section F-3207.5 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

F-3207.5 Fuel dispensing systems. Above ground tanks shall be permitted for the storage of combustible motor fuels on premises to which the public does not have access when installed in a special enclosure constructed in accordance with NFPA 30A listed in Chapter 44 of the BOCA Fire Prevention Code.

(ee) Section F-3207.5.3 is amended by changing the following numbers: "6,000" to "1,000" and "18,000" to "1,500."

(ff) Section F-3207.0 is amended by adding the following sections:

F-3207.6 Storage of waste oils. Waste oils shall be stored in a listed double wall tank located outside the building with a minimum 2" diameter steel vent pipe extending at least 18" above the roof line. The tank shall be installed on a concrete pad with drainage and shall be protected from vehicular traffic damage in an approved manner and shall be blocked from view by an approved fence a minimum of six feet high. The tank and all associated piping shall be air pressure tested in the manner prescribed by the manufacturer and such test shall be witnessed by the code official.

F-3207.6.1 Maximum waste oil storage above ground. The maximum amount of waste oil stored outside above ground without additional protection shall be 660 gallons. Where the amount stored outside above ground exceeds 660 gallons, the installation shall comply with NFPA 31 listed in Chapter 44 of the BOCA Fire Prevention Code.

F-3207.7 Storage of motor oils in above ground tanks. New motor oils shall be stored in a listed single wall tank if stored inside, or a listed double wall tank if stored outside. When stored outside, the tank shall be installed on a concrete pad with drainage, shall be protected from vehicular traffic damage in an approved manner, and shall be blocked from view by an approved fence a minimum of six feet high. The tank and all associated piping shall be air pressure tested in the manner prescribed by the manufacturer and such test shall be witnessed by the code official.

F-3207.7.1 Maximum motor oil storage above ground: The maximum amount of new motor oil stored in above ground tanks inside a building shall not exceed 1,320 gallons. If stored outside, the maximum amount of new motor oil shall not exceed 1,320 gallons without additional protection pursuant to NFPA 31 listed in Chapter 44 of the BOCA Fire Prevention Code.

(gg) Section F-3601.2 is amended by deleting the same in its entirety and substituting in lieu thereof the following:

F-3601.2 Permits required.

(a) A permit shall be obtained from the code official for each of the following:

(1) installation of liquified petroleum gas tanks regardless of the capacity;
(2) sales or exchanges of filled tanks and the filling of tanks of any size for sale or use on site;

(3) for the storage of containers used in commercial, maintenance, construction, stock management or vehicles, and

(4) any other use where tanks are used and stored on a regular basis.

(b) Prior to installation, use or storage of liquified or petroleum gas, the applicant for a permit shall submit plans to the code official detailing such installation, use or storage. If compliance with the requirements of this Code is shown by such plans, a permit shall be issued. The code official shall inspect

the site upon completion of the installation to determine compliance with the plans and the ordinances of the Village.

(hh) Section F-3603.0 is amended by adding the following section:

F-3603.4 Storage of containers. Containers stored inside or outside a building shall be secured inside a shelf or rack system of non-combustible construction or shall be chained to a non-combustible wall. Either method of storage shall prevent the tank from "rocketing" if exposed to fire. If stored outside, tanks shall be protected from tampering.

(ii) Section F-518.1 is hereby amended by adding the following section:

Portable fire extinguishers shall be selected, distributed, inspected, maintained, tested and recharged in accordance with NFPA 10. (Ord. No. 2857, § 8; Ord. No. 3118, § 20; Ord. No. 3185, § 3.)

SECTION 2. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION 3. That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

Mayor

Passed:

Published:

Attest: _____
Village Clerk

[sprink]

