

**ORDINANCE AMENDING THE VILLAGE CODE
OF THE VILLAGE OF BARRINGTON HILLS**

WHEREAS, the Board of Health of the Village of Barrington Hills has determined that certain technical amendments need to be made to the Village ordinances regarding private sewage disposal;

WHEREAS, the Board of Health has also determined that the Village should permit the installation of "chamber" septic systems;

WHEREAS, the Board of Trustees of the Village of Barrington Hills has determined it is in the best interest of the citizens of the Village in order to protect the health, safety and welfare of the Village and its citizens, to amend Section 4-2-7 of the Village Code to make certain technical amendments and permit the installation of chamber septic systems.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Barrington Hills, Cook, Kane, Lake and McHenry Counties, Illinois, as a home rule municipality, the following:

Section One: Section 4-2-7 of the Village Code shall be, and the same hereby is amended as follows:

(A) Section 4-2-7(C)(22) is amended to read as follows:

"SUBSURFACE SEEPAGE SYSTEM" means all approved components of a subsurface seepage field, seepage bed, chamber system, or buried sand filter."

(B) Sections 4-2-7(D)1c,d are amended by adding the following Subsections c and d:

"c. Credit for Existing Systems: For new construction or the addition of one or more bedrooms that will utilize an existing septic system, credit will be assigned based on the age and use of the existing seepage field upon the date of the building permit application. For existing systems less than 10 years old, 100% credit is assigned to the length of distribution lines in place. For existing systems less than 20 years old but greater than 10 years old, 50% credit is assigned to the length of distribution lines in place, unless an inspection of the existing system by the Village Health Officer warrants that additional credit can be assigned; up to 100% credit can be assigned for systems less than 20 years old. For existing systems greater than 20 years old, no credit is assigned to the length of the distribution lines in place; up to 50% credit can be assigned based on an inspection of the existing system by the Village Health Officer."

"d. Credit for Existing Chamber Systems: For new construction or the addition of one or more bedrooms that will utilize an existing chamber septic

system, credit will be assigned based on the age and use of the existing chamber system upon the date of the building permit application. For existing chamber systems less than 15 years old, 100% credit is assigned to the length of distribution lines in place. For existing chamber systems less than 30 years old but greater than 15 years old, 50% credit is assigned to the length of distribution lines in place, unless an inspection of the existing chamber system by the Village Health Officer warrants that additional credit can be assigned; up to 100% credit can be assigned for systems less than 30 years old. For existing systems greater than 30 years old, no credit is assigned to the length of the distribution lines in place; up to 50% credit can be assigned based on an inspection of the existing chamber system by the Village Health Officer.”

(C) Section 4-2-7(D) is amended by adding the following Subsection 11:

“11. Detached guesthouses: Septic systems serving detached guesthouses having less than three bedrooms shall be designed in accordance with the minimum requirements for a primary residence.”

(D) Section 4-2-7(H)1 is amended by adding the following subsection e:

“e. Validity of Percolation Test Results: Percolation tests results are acceptable for purposes of septic system design for a period of five years after the date of the test, unless any construction activities occur on the subject property after the date of the percolation test, in which case a new percolation test will be required.”

(E) Sections 4-2-7(H)4,5,6 are amended to read as follows

“4. Bedding Material: The bedding material shall be washed gravel or washed stone with a particle size ranging from three-fourths inch (3/4") minimum to one and one-half inches (1 1/2") maximum, except where a chamber system is approved. The bedding material shall extend the full width of the trench as illustrated in Appendix I of this Section. The bedding materials shall be covered by straw, newspaper, or untreated building paper or other pervious material to support the backfill as the laying of the distribution line proceeds. Tar paper, plastic, or other impervious material shall not be used between the bedding material and the earth backfill. Chamber systems may be bedded with material excavated to construct the system. The backfill material shall not contain large clods of earth, demolition material or other extraneous material. No straw, newspaper, or untreated building paper shall be placed between the chamber system and the earth backfill.”

“5. Distribution Lines: Distribution lines shall be constructed of materials as approved in Appendix C of this Section. The lines shall be perforated or open joint tile. Where open joint tile is used, the tile sections shall be spaced not less than one-fourth inch (1/4") nor more than one-half inch (1/2") apart. Perforated

pipng shall have one-half to three-fourths inch (1/2" - 3/4") diameter openings on three to five inch (3" - 5 ") centers with a minimum of two (2) rows. The ends of the lines shall be looped except in serial distribution systems. Chambers systems shall include connections between adjacent chambers to prevent soil intrusion. Each row of a chamber system shall include an inlet end cap and an outlet end cap, and shall be bent no more than 20 degrees per unit unless it is capped and piped to another line."

"6. Serial Distribution: The following criteria, as illustrated in Appendix J of this Section, shall be used in the design and construction of a serial distribution system:

- a. The bottom of each trench and its distribution line shall be level at a depth not greater than thirty six inches (36") from finished grade.
- b. There shall be a minimum of six inches (6") to a maximum of twenty four inches (24 ") of earth backfill over the bedding material in the trenches or over the top of a chamber in a chamber system. Machinery which may crush or disturb the alignment of pipe in the trench shall not be allowed on any part of the proposed area.
- c. The trench shall follow the ground surface contours so that variation in trench depth will be minimized.
- d. There shall be a minimum of six feet (6') of undisturbed earth between the septic tank and the nearest trench.
- e. Drop boxes shall be arranged in series, so that each trench is completely filled to the full depth of the gravel or to the top of the chamber in a chamber system before effluent flows to the succeeding trench.
- f. The drop boxes connecting the trenches shall have watertight joints and direct connections to the distribution lines in adjacent trenches. Drop boxes, tight joint "T's" or forty five degree (450) ells shall be used to connect adjacent trenches.
- g. Where the drop box trench connects with the higher trench, it shall not be deeper than the top of the gravel in the higher trench or the top of the higher chamber in a chamber system. Drop boxes shall rest on undisturbed earth and the backfill shall be carefully tamped.
- h. The invert of the first drop box line shall be at least six inches (6") lower than the invert of the septic tank or aerobic treatment plant outlet. (See Appendix J of this Section.)

- i. All other construction features of the serial distribution field shall comply with subsection (H) 1 through 8 of this Section.”

(F) Appendix D to Section 4-2-7 is amended to read as follows:

LOCATION OF COMPONENTS OF PRIVATE DISPOSAL SYSTEMS¹
MINIMUM DISTANCE ALLOWABLE FROM

COMPONENT PART OF SYSTEM	Well or Suction Line from Pump to Well	Water Supply Line ₃ (Pressure)	Lake, Stream or Other Body of Water ₄	Dwelling	Property Line or R.O.W. ₅	Field Drain Tile
	FEET	FEET	FEET	FEET	FEET	FEET
Building Sewer ₂	50	10	50	-	-	-
Septic Tank/Aerobic Treatment Plant	50	10	50	10	10	-
Distribution Box	75	10	50	10	10	
Subsurface Seepage System (Except Chamber Systems)	75	25	50	20	10	10
Sand Filter	75	25	50	20	10	10
Chamber System	100	25	100	20	10	25

1. These distances have been determined for use in clay and loam soils only. The minimum distances required for the use of private sewage disposal in other types of soil shall be determined and approved by the village when the soil in question can provide equal or greater treatment of the sewage. See 4-2-7(D) for additional requirements.

2. The building sewer may be located to within 10 feet of a well or suction line from the pump to the well when cast iron pipe with mechanical joints for Schedule 40 PVC Pipe with water-tight joints is used for the building sewer.

3. See 4-2-7(D) for details on the separation of sewer and water lines.

4. The minimum distance allowable from an in ground swimming pool is 25 feet. See 4-2-7(K) for additional requirements.

5. Whichever line is most restrictive.

(G) The Notes to Appendix G to Section 4-2-7 are hereby amended to read as follows:

1 - Absorption area is calculated as trench bottom area in absorption trenches; effective sidewall area in seepage pits; bottom area in seepage beds. Absorption

area for chamber systems shall be calculated as 133% of the nominal chamber width, up to a maximum chamber width of 36".

2 - Under 3 minutes or 60 minutes and over is unsuitable for subsurface seepage system. Under 5 minutes is unsuitable for a chamber system.

3 - Over 30 minutes is unsuitable for seepage pits.

4 - Average percolation rate is the arithmetic average of 6 test holes located within the subsurface area. Consult with the Building Officer if 3 or more individual tests are 60 or over. Consult with the Building Officer if there is more than a 30-minute difference between individual tests.

(H) Appendix 1 to Section 4-2-7 is amended by adding the illustrations attached hereto

Section Two: Should any part or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of this Ordinance as a whole or any part thereof other than the part declared to be invalid.

Section Three: This Ordinance shall be in full force and effect after its passage, approval and publication in pamphlet form.

Passed this 26th day of February, 2007

AYES: 5 NAYS: 0 ABSENT: 2

Approved this 26th day of February, 2007


Village President

ATTEST:


Village Clerk, Deputy