Chapter H 65

SUBDIVISIONS NOT SERVED BY PUBLIC SEWERS

History: Chapter H 65 as it existed on August 31, 1968, was repealed and a new chapter H 65 was created, Register, August, 1968, No. 152, eff. 9–1–68.

H 65.01 Applicability. These regulations governing lot size and elevation shall be applicable to any subdivision, as defined in section 236.02 (8), Wis. Stats., not served by a public sewer, where provision for such service has not been made. Provision for such service shall be considered to have been made only if the entire subdivision will be served by a public sewer at the time of occupancy of the first 2 buildings constructed therein, or the municipality, town or town sanitary district has by resolution or other official action provided that public sewers will be extended to buildings within the subdivision as they are occupied.

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.02 Definitions. For the purposes of these regulations the following terms mean:

(1) BEDROCK, any solid rock exposed at the surface or overlain by unconsolidated material.

(2) DEEP ABSORPTION SYSTEM, a seepage pit, seepage bed or trench system developed to a depth of more than 36 inches below the final grade.

(3) DETAILED SOIL MAP, a map prepared by a state or federal agency showing soil series, type and phases at a scale of not more than 2,000 feet to the inch.

(4) DIVISION, the division of health, department of health and social services.

(5) MINIMUM LOT AREA, the area established in Wis. Adm. Code section H 65.03 as the minimum area for a given situation.

(6) PRIMARY PLAT APPROVING AUTHORITY, the plat approving authority of the municipality, town or county in which the proposed subdivision is located.

(7) PUBLIC SEWERS, sewers and treatment facilities used in connection therewith, which are maintained and operated by a municipality, privately owned public utility, town or town sanitary district.

(8) PUBLIC WATER SUPPLY SYSTEMS, a water system serving 10 or more premises of mixed ownership.

(9) SHALLOW ABSORPTION SYSTEM, a seepage bed or trench system developed to a depth of 36 inches or less below the final grade.

(10) SOIL, all unconsolidated material overlying bedrock.

(11) SUBDIVISION PLAN, a map showing the numbers and the boundary lines of all lots and blocks. Such map may be a copy of the plat of a proposed subdivision.

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.03 Lot area. (1) The area of any lot shall be sufficient to permit the use of a sewage absorption system of a shallow or deep type and be based upon the results of soil percolation tests conducted in accordance with the procedure given in section H 65.06. To be considered for area reduction, plans of a public water supply to serve a subdivision shall be approved by the division of environmental protection, department of natural resources.

(2) The minimum lot areas shall be as follows:

Class	Minutes Required for Water to Fall One Inch		Minimum Lot Area—Square Feet	
	Shallow Absorption Systems	Deep Absorption Systems	Private Water Supply Systems	Public Water Supply Systems
1	Under 3	Under 2	20,000	10,000
2	3 to 30	2 to 10	15,000	12,000
3	30 to 45	10 to 30	20,000	15,000
4	45 to 60	30 to 60	40,000	30,000

(3) Pending installation of public sewers, the minimum lot areas shown in the table may be provided through use of 2 or more lots, if suitable combinations are designated on a subdivision plan and the primary plat approving authority has an ordinance which will permit it to control the erection of buildings on such combination of lots and there is evidence that there will be enforcement of such ordinance. Two copies of any subdivision plan concerning aforesaid lot combinations shall be supplied to the division, one copy of which, appropriately marked, shall be returned to the primary approving authority if the plan is acceptable to the division.

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.04 Lot width and length. Where not inconsistent with section 236.16 (1), Wis. Stats., each lot of class 1, 2 or 3 shall have a minimum average width of 75 feet or an average width of not less than the number obtained by dividing the minimum lot area by 200, whichever is greater. Each lot of class 4 shall have a minimum width of 100 feet. Any portion of lots in any class having a width of less than 30 feet shall not be considered in determining conformity with sections H 65.03 (2) (3).

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.05 Elevation. (1) FLOOD WATER. Ninety per cent of the minimum lot area of each lot shall be at least 2 feet above the highest known flood water elevation of any lake or stream affecting the subdivision, excepting when the highest flood frequency level has been established such shall be used. Where this is a factor, the plat shall show a contour 2 feet above such water elevation.

(2) GROUND WATER. Eighty per cent of the minimum lot area of each lot shall be at least 3 feet and 20% of the minimum lot area of each lot shall be at least 6 feet above the highest ground water

level as estimated by the person certifying the soil boring test data. Estimates shall be subject to verification by a plat approving authority and the division. Verification shall include, but not be limited to, a morphological study of soil conditions with particular reference to soil color and sequence of horizons. Where the natural soil condition has been altered by filling or other attempts to improve wet areas, verification may require observation of ground water levels under saturated soil conditions.

(3) BEDROCK. Eighty per cent of the minimum lot area of each lot shall have at least 3 feet and 20% of the minimum lot area of each lot shall have at least 6 feet of soil cover over bedrock. Depth to bedrock shall be determined by adequate soil investigation and shall be subject to verification by the division.

(4) GROUND SLOPE. Fifty per cent of the minimum lot area of each lot in the class indicated shall have ground slopes not exceeding the following:

Class	*Slope*
1	20%
2	15%
3	15%
4	10%

Areas containing ground slope exceeding the indicated percentage shall be accurately delineated on a subdivision plan by an engineer, architect or surveyor registered in Wisconsin and so certified to on the subdivision plan. Such information shall be submitted to the division for review and shall be subject to verification.

(5) CONTINUOUS AREA REQUIREMENT. In addition to complying with subsections (1) through (4), each lot shall have a continuous area equal to 20% of its minimum lot area which shall meet all of the following:

(a) Is at least 2 feet above the highest known or established flood water level.

(b) Is at least 6 feet above the highest ground water level.

(c) Has at least 6 feet of soil cover over bedrock.

(d) Has ground slopes not exceeding the percentages listed for its class in subsection (4).

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.06 Soil Tests. (1) SUPERVISION. Soil boring and percolation tests shall be made by or under the direction and control of an engineer, architect, surveyor or sanitarian registered in Wisconsin, or master plumber or master plumber restricted licensed in Wisconsin to install private sewage disposal systems. The person supervising the tests shall certify as to correctness of procedure and results. Blank forms supplied by the division shall be used for reporting results and providing certification.

(2) SOIL BORING TESTS. Sufficient borings shall be made in each subdivision to portray adequately the character of the soil, ground water levels and depths to bedrock. The borings shall be distributed as uniformly as possible and their locations shall be shown on a subdivision plan. At least one test per 2 acres shall be made initially unless a detailed soil map for the area is available to the division in which case at least one test per 5 acres shall be made initially.

When borings show marked variation in soil, depth to water or depth to bedrock, at least one boring per acre of area shall be made. All borings shall extend to a depth of 6 feet, unless bedrock is at a lesser depth. Where deep absorption systems are proposed, bore holes shall extend 3 feet below the expected depth of the absorption system.

(3) PERCOLATION TESTS. (a) Sufficient percolation tests shall be made in each subdivision except as allowed in (b) and (c) of this subsection to determine adequately the ability of the soil to absorb sewage effluent. The percolation tests shall be distributed as uniformly as possible and their locations shall be shown on a subdivision plan. At least one test per 2 acres shall be made initially unless a detailed soil map for the area is available to the division in which case at least one test per 5 acres shall be made initially. When test results show marked variation in soil permeability, at least one test per acre shall be made. All percolation tests shall be made at the depth at which the facilities for effluent disposal are to be installed. The final grade of the subdivision shall control test depth. For shallow absorption systems the depth of the test holes shall not exceed that corresponding to a depth of 36 inches on the basis of final grade. When soil borings disclose soils better suited for effluent disposal at a greater depth than 36 inches, percolation tests to determine feasibility of disposal of effluent by deep absorption systems may be made.

(b) Where a sandy soil condition prevails and all lots of the subdivision are at least 20,000 square feet, percolation tests are not required. The division reserves the right when it deems it necessary to require proof that the minutes required for water to fall one inch is under 3.

(c) The division may waive the necessity for conducting soil percolation tests where a detailed soil map clearly indicates soil permeability equivalent to the class of lot proposed. Such waiver shall be obtained in writing from the division prior to the first submission of the plat.

(4) PERCOLATION TEST PROCEDURE. (a) Type of hole. The hole shall be dug or bored. It shall have vertical sides and have a horizontal dimension of 4 to 12 inches.

(b) *Preparation of hole.* The bottom and sides of the hole shall be carefully scratched with a sharp pointed instrument to expose the natural soil interface. All loose material shall be removed from the bottom of the hole which shall then be covered with 2 inches of coarse sand or gravel when necessary to prevent scouring.

(c) *Test procedure, sandy soils.* For tests in sandy soils containing little or no clay, the hole shall be carefully filled with clear water to a minimum depth of 12 inches over the gravel and the time for this amount of water to seep away shall be determined. The procedure shall be repeated and if the water from the second filling of the hole at least 12 inches above the gravel seeps away in 10 minutes or less, the test may proceed immediately as follows: Water shall be added to a point not more than 6 inches above the gravel. Thereupon, from a fixed reference point, water levels shall be measured at 10 minute intervals for a period of one hour. If 6 inches of water seeps away in less than 10 minutes, a shorter interval between measurements shall be used, but in no case shall the water depth exceed

6 inches. The final water level drop shall be used to calculate the percolation rate. Soils not meeting the above requirements shall be tested as in subsection (d) below.

(d) *Test procedure, other soils.* The hole shall be carefully filled with clear water and a minimum water depth of 12 inches shall be maintained above the gravel for a four-hour period by refilling whenever necessary or by use of an automatic siphon. Water remaining in the hole after 4 hours shall not be removed. The soil shall be allowed to swell not less than 16 hours or more than 30 hours. Immediately following the soil swelling period, the percolation rate measurements shall be made as follows: Any soil which has sloughed into the hole shall be removed and water shall be adjusted to 6 inches over the gravel. Thereupon, from a fixed reference point, the water level shall be measured at 30 minute intervals for a period of 4 hours unless 2 successive water level drops do not vary by more than 1/16 of an inch. The hole shall be filled with clear water to a point not more than 6 inches above the gravel whenever it becomes nearly empty. Adjustment of the water level shall not be made during the last 3 measurement periods except to the limits of the last measured water level drop. When the first 6 inches of water seeps away in less than 30 minutes, the time interval between measurements shall be 10 minutes and the test run for 1 hour. The water depth shall not exceed 6 inches at any time during the measurement period. The drop that occurs during the final measurement period shall be used in calculating the percolation rate.

(5) INTERPRETATION. In interpreting percolation test results, the percolation rates for the same type of soil which establish larger minimum lot areas shall be used to determine conformity with section H 65.03 (2).

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.

H 65.07 Individual lot soil tests. Since there may be considerable variation in ability of soil to absorb sewage effluent on the individual lots in an approved subdivision, attention is directed to the necessity of conducting individual lot soil percolation tests as specified in Wis. Adm. Code chapter H 62, prior to construction of a sewage absorption system. The subdivision soil percolation test data obtained in section H 65.06 (4) are not to be used in designing soil absorption systems for the individual lots in the subdivision unless such data include results of at least 3 tests conducted in the proposed disposal system area on each lot.

History: Cr. Register, August, 1968, No. 152, eff. 9–1–68.