Chapter H 65

SUBDIVISIONS NOT SERVED BY PUBLIC SEWERS

Note: Chapter H as it existed on November 30, 1975 was repealed and a new chapter H 65 was created, effective December 1, 1975.

H 65.01 Scope. (1) APPLICABILITY. These regulations governing lot size and elevation shall be applicable to any plat submitted for state level review for any subdivision not served by a public sewer and 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 approved public sewers at the time of occupancy of the first 2 buildings constructed therein, or the city, village, town or town sanitary district has by resolution or other official action provided that public sewers will be extended to buildings within the subdivision prior to occupancy.

(2) LIMITATION. These basic regulations apply to detached single family dwelling unit lots. For all other proposed subdivisions not served by public sewers, the department shall be consulted prior to preparation of the plat.

History: Cr. November, 1975, No. 239, eff. 12-1-75.

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

(1) DEPARTMENT. The department of health and social services.

(2) AVERAGE LOT WIDTH. The number computed by using distances between side lot lines which are perpendicular to the line bisecting the angle formed by the side lot lines using the widest portion of the lot containing the minimum lot area. See appendix.

(3) BEDROCK. Any solid rock which cannot be removed by ordinary excavating equipment, or if removable, the weathered in-place material is greater than 50% consolidated.

(4) DETAILED SOIL MAP. A map prepared by or for a state or federal agency participating in the national cooperative soil survey showing soil series, type and phases at a scale of not more than 2,000 feet to the inch.

(5) ENFORCEMENT AUTHORITY. The city, village, town, county or combinations thereof in which the proposed subdivision is located.

(6) FORMAL REVIEW. Review required as a result of a submission in accordance with procedures listed in ch. 236, Stats.

(7) HIGH GROUNDWATER LEVEL. The elevation to which the soil is saturated, as observed as a free water surface in an unlined hole, or has been saturated as may be indicated by soil color patterns, whichever of the 2 levels is higher.

(8) INFORMAL REVIEW. Review requested in writing by the subdivider, developer, owner or anyone of their agents.

(9) MINIMUM CONTINUOUS LOT AREA. That area of a lot which is contiguous and meets all of the elevation requirements of this chapter relating to flooding, high groundwater, bedrock, land slopes and depth of suitable permeability.

(10) MINIMUM LOT AREA. The area established in s. H 65.03 as the minimum area for a given situation.

(11) PUBLIC SEWER. Sewers and treatment facilities used in connection therewith, which are maintained and operated by a city, village, town, county, privately owned public utility, town sanitary district or metropolitan sewerage district.

(12) PUBLIC WATER SUPPLY. A water system so designated and approved by the department of natural resources.

(13) SOIL. All unconsolidated material overlying bedrock.

(14) 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. November, 1975, No. 239, eff. 12-1-75.

H 65.03 Lot area and average lot widths. (1) GENERAL REQUIREMENT. The area of any lot shall be sufficient to permit the use of a sewage absorption system and one replacement system based upon the results of soil tests conducted in accordance with the procedure given in s. H 65.06.

(2) MINIMUM AREAS AND WIDTHS. Unless reduced under sub. (4), the minimum lot areas and average lot widths shall be as listed in the columns under private water supply systems.

TABLE I

		PRIVATE WATER SUPPLY SYSTEMS		PUBLIC WATER SUPPLY SYSTEMS	
Class	Minutes Required For Water To Fall One Inch	Minimum Lot Area Square Feet	Minimum Average Lot Width—Feet	Minimum Lot Area Square Feet	Minimum Average Lot Width—Feet
1	under 10	20,000	100	12,000	75
2	10 to 30	20,000	100	14,000	75
3	30 to 45	25,000	100	16,000	75
4	45 to 60	30,000	100	18,000	100

(3) EASEMENTS. Easements for streets or utilities which are greater than 20 feet wide shall not be considered in determining minimum lot area unless approved in writing by the department.

(4) METHODS TO REDUCE MINIMUM LOT AREA. (a) *Public water supply.* The department shall consider a public water supply to be available if plans of a public water supply to serve a subdivision have been approved by the department of natural resources and the controlling local governmental unit has by resolution or other official action required that water mains will be extended to buildings within the subdivision prior to occu-

pancy. The reduced minimum lot area and average lot widths in Table I as listed in the columns under public water supply systems shall not be used unless a public water supply is available.

(b) *Lot combinations.* Pending installation of public sewers, the minimum lot areas shown in Table I may be provided through use of 2 or more lots, if suitable combinations are designated on a subdivision plan and the enforcement authority has an ordinance which will permit it to control the erection of buildings on such combination of lots. Two copies of any subdivision plan concerning aforesaid lot combinations shall be supplied to the department, one certified copy of which shall be returned to the enforcement authority if the plan is acceptable to the department.

(c) *Open space developments.* The department may approve a reduction of up to 50% of the minimum lot area for each class if an area which may be used for liquid waste disposal is provided adjacent to each lot by permanent easement or permanent restrictive covenant which together with the lot area combine to form not less than the minimum lot area for that class. However, the department shall require the combined area to meet the minimum average lot width and minimum continuous lot area requirements for that class.

(5) AVERAGE LOT WIDTH. Each lot shall have a minimum average lot width as shown in sub. (2). Any portion of lots in any class having a width of less than 30 feet shall not be considered in determining conformity with subs. (2) and (4).

History: Cr. November, 1975, No. 239, eff. 12-1-75.

H 65.04 Elevation. Unless reduced under sub. (6), each lot shall have a minimum continuous lot area as defined in s. H 65.02 (9), consisting of at least 50% of its minimum lot area as required in s. H 65.03 (2) which shall meet all of the elevation requirements in the following subsections of this section relating to floodwater, high groundwater, bedrock, land slopes and depth of suitable permeability.

(1) FLOODWATER. (a) *Rivers, streams and flow-through lakes.* Ninety percent of the minimum lot area of each lot as defined in s. H 65.02 (10) shall be above the regional flood elevation as determined or approved by the department of natural resources. Where this is a factor, the regional flood elevation shall be delineated on all preliminary and final plats.

(b) *Other water bodies.* Ninety percent of the minimum lot area of each lot as defined in s. H 65.02 (10) shall be at least 2 feet above the highest known water elevation. Where this is a factor, the highest known water elevation and the contour 2 feet above such elevation shall be shown on all preliminary and final plats.

(2) HIGH GROUNDWATER. There shall be at least 5 feet of soil above the high groundwater level which shall be estimated by the person certifying the soil boring test data. Estimates may be subject to verification by the department. Verification may include, but not necessarily 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 attempts to lower groundwater levels, the department may require verification by observation of groundwater levels under expected saturated soil conditions.

(3) BEDROCK. There shall be at least 5 feet of soil over bedrock. Depth to bedrock shall be determined by adequate soil investigation and may be subject to verification by the department.

(4) GROUND SLOPE. (a) *General requirement.* Ground slopes, if any, shall not exceed the following:

TABLE II

Class of Slope	Percolation Rate— Minutes per Inch	Slope
1	under 3	20%
2	3 to 45	15%
3	45 to 60	10%

Areas containing ground slope exceeding the indicated percentage shall be accurately delineated on a subdivision plan by a land surveyor registered in Wisconsin and so certified to on the subdivision plan. If no such slopes exist, the surveyor shall so state and certify. Such information shall be submitted to the department for review and may be subject to verification.

(b) *Exception.* Where a sandy soil condition prevails and soil percolation tests are not required the 15% slope rule shall apply unless proof is given that the 20% slope rule can apply.

(5) DEPTH OF SUITABLE PERMEABILITY. Soil having a percolation rate of 60 minutes per inch or faster shall exist for the depth of the proposed soil at least 3 feet below the proposed bottom of the soil absorption system. Depth of suitable permeability may be subject to verification by the department through the use of soil tests.

(6) METHOD TO REDUCE MINIMUM CONTINUOUS LOT AREA. (a) *General.* The department may permit the minimum continuous lot area requirements to be reduced to the extent shown in Table III if building area, well area and 2 shallow soil absorption system areas are preplanned and designated on a subdivision plan. The shape and location of such preplanned area shall be subject to approval by the department. Preplanned areas shall be clearly shown on all preliminary plats and on the original final plat or on a separate sheet or sheets and 2 copies shall be supplied to the department. If the plan is acceptable, the department shall so mark both copies and shall return one copy to the enforcement authority. The final plat must be marked to clearly show which lots have preplanned areas. No changes in preplanned areas may be made unless approved in writing by the department. In all cases, the department shall require a minimum area which meets all of the requirements of this section for each preplanned soil absorption system as follows:

TABLE III

Lot Class	Minimum Area Required For Each Preplanned Soil Absorption System — Square Feet (Minimum of 2 Required)
1	2000
2	3000
3	3600
4	3900

(b) *Separating distances.* The department shall require the reduced minimum continuous lot area or areas to be at least:

1. Fifty feet from the high water mark of any lake, stream or other watercourse, well or water reservoir.

2. Twenty-five feet from any habitable building or dwelling or building with below grade foundation which will remain in use after sale of the lot.

3. Twenty feet from the top of ground slopes exceeding the percentages listed for its class shown in (4).

4. Five feet from any lot line.

(c) *Easements.* The minimum continuous area defined in s. H 65.02 (9) and the reduced minimum continuous lot area in this section shall not include any easement unless approved in writing by the department.

History: Cr. November, 1975, No. 239, eff. 12-1-75.

H 65.05 Outlot restrictions. Any outlots that do not meet lot area, width, elevation or minimum continuous lot area requirements in ss. H 65.03 and 65.04 shall be restricted by a clearly labeled restriction on the original final plat. This restriction shall prohibit the erection of buildings for human habitation until public sewers are available and prohibit the installation of soil absorption systems on such outlots.

History: Cr. November, 1975, No. 239, eff. 12-1-75.

H 65.06 Soil tests. (1) SUPERVISION. Soil boring and percolation tests shall be made by a soil tester certified by the department. Test data shall be certified and reported by the certified soil tester on forms furnished by the department. In addition, the certified soil tester or land surveyor shall certify on the preliminary plat as to accuracy of the location of the soil test sites shown on the preliminary plat.

(2) SOIL BORING TESTS. (a) *General requirement.* Sufficient borings shall be made in each subdivision to portray adequately the character of the soil, groundwater 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 acre shall be made initially unless a detailed soil map for the area is available to the department in which case at least one test per 3 acres shall be made initially. All borings shall extend to a depth of 6 feet, unless bedrock is at a lesser depth. In all cases the bore holes shall extend 3 feet below the expected depth of the absorption system.

(b) *Exceptions.* 1. The number of tests may be reduced if lot area exceeds one acre and uniform soil conditions prevail.

2. When borings show marked variation in soil, depth to water or depth to bedrock, at least 2 borings per acre of area shall be made.

(3) PERCOLATION TESTS. (a) *General requirement.* Sufficient percolation tests shall be made in each subdivision to determine adequately the ability of the soil to absorb sewage effluent. The percolation tests shall be distributed as uniformly as possible in suitable soil areas and their locations shall be shown on a subdivision plan. At least one test per acre shall be made initially unless a detailed soil map for the area is available to the department in which case at least one test per 3 acres shall be

made initially. 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.

(b) *Exceptions.* 1. The number of tests may be reduced if lot area exceeds one acre and uniform soil conditions prevail.

2. When test results show marked variation in soil permeability, at least 2 tests per acre shall be made.

3. Where a sandy soil condition prevails, percolation tests are not required. The department reserves the right to require proof that the time required for water to fall one inch is under 3 minutes for application of the 20% land slope rule (s. H 65.04 (4)).

(c) *Waiver.* The department 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 department prior to the first submission of the plat to the state.

(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 hole and the bottom shall be covered with 2 inches of course sand or gravel.

(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 shal 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 par. (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 4-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. Thereafter the soil shall be allowed to swell not less than 16 hours nor 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 inch. At least 3 water level drops must be observed and recorded. 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 one 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 s. H 65.03 (2).

History: Cr. November, 1975, No. 239, eff. 12-1-75.

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 ch. H 62, Wis. Adm. Code, prior to construction of a sewage absorption system. The subdivision soil test data obtained in s. H 65.06 shall not be used in designing soil absorption systems for the individual lots in the subdivision unless such data include results of tests required by ch. H 62, Wis. Adm. Code.

History: Cr. November, 1975, No. 239, eff. 12-1-75.

H 65.08 Plat review fees. Plat review fees shall be charged in accordance with s. Ind 69.22, Wis. Adm. Code.

History: Cr. November, 1975, No. 239, eff. 12-1-75. r and recr. Rgister, June, 1982, No. 318, eff. 7-1-82.

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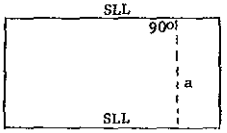
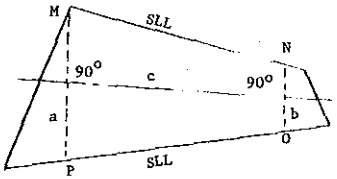
SAMPLES OF AVERAGE LOT WIDTH DETERMINATIONS

a) Parallel Lot Lines



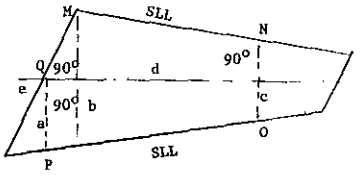
Average Lot Width is perpendicular distance between Side Lot Lines (SLL)

b) Non Parallel Lot Lines



Average Lot Width is $\frac{a + b}{2}$, Area of MNOP Equals Minimum Lot Area and line c bisects angle formed by lines MN and OP extended

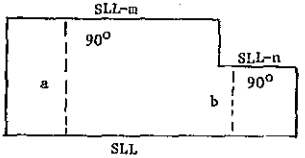
c) Non Parallel Lot Lines, alternate



Average Lot Width is $\frac{a + b}{2} \times \frac{e}{e + d} + \frac{b + c}{2} \times \frac{d}{e + d}$

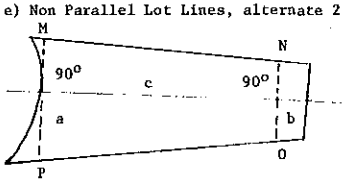
Area of MNOPQ equals Minimum Lot Area and line d bisects angle formed by lines MN and OP extended

d) Parallel Side Lot Lines



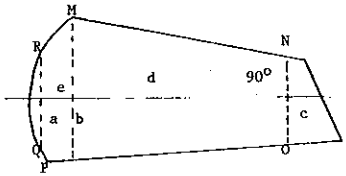
Average lot width is $a \times \frac{m}{m + n} + b \times \frac{n}{m + n}$

e) Non Parallel Lot Lines, alternate 2



Average Lot Width is $\frac{a + b}{2}$, Area of MNOP Equals Minimum Lot Area and line c bisects angle formed by lines MN and OP extended

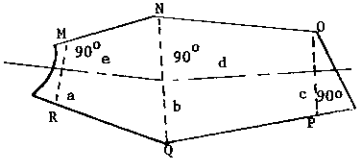
f) Non Parallel Lot Lines, alternate 3



Average Lot Width is $\frac{a + b}{2} \times \frac{e}{e + d} + \frac{b + c}{2} \times \frac{d}{e + d}$

Area of MNOPQR equals Minimum Lot Area and line d bisects angle formed by lines MN and OP extended

g) Non Parallel Lot Lines, alternate 4



Average Lot Width is $\frac{a + b}{2} \times \frac{e}{e + d} + \frac{b + c}{2} \times \frac{d}{e + d}$

Area of MNOPQR equals Minimum Lot Area, line e bisects angle formed by MN and QR extended and line d bisects angle formed by NO and PQ extended