USE & EXPLANATION of

SOIL SURVEY TABLES

for

MERRIMACK COUNTY

New Hampshire

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USE AND EXPLANATION OF SOIL SURVEY TABLES
MERRIMACK COUNTY, NEW HAMPSHIRE

INTRODUCTION

The soil survey tables for Merrimack County provide information about engineering properties of soils, the suitability of soils as resource material, and major soil features affecting engineering uses of soils. The tables also contain information relative to the degree of soil limitations for sanitary facilities, building site development, construction material, water management, and recreational uses, and suitability for farm, woodland, and wildlife uses. These tables supplement the Soil Survey report for Merrimack County.

The purpose of the soil survey tables is to provide users of soil maps with predictions of soil behavior. The interpretations are predictions of soil behavior under stated conditions. They are not recommendations.

Three degrees of soil limitations are given for town and country planning and recreational uses. They are defined as follows:

Slight -- rating given soils that have properties favorable for the intended use. The degree of limitation is minor and can be overcome easily. Good performance and low maintenance can be expected.

Moderate -- rating given soils that have properties moderately favorable for the intended use. Limitations can be overcome or modified by special planning, design, or maintenance. During some part of the year, the expected performance of the structure or other planned use is somewhat less desirable than for soils rated slight.

Severe -- rating given soils that have one or more properties unfavorable for the intended use. Generally requires major soil reclamation, special design, or intensive maintenance.

A rating of severe does not mean that a soil cannot be used for the intended use. However, it does mean that severe limitations exist that must be overcome with proper design or operation. It commonly is more expensive to develop soils with a severe limitation than those with slight or moderate limitations. The soil survey and interpretations is best suited in selecting sites with the least limitations for the intended use.

In these interpretations, no consideration was given to the size and shape of the mapped soil areas, nor to the pattern they form with other soils on the landscape. For example, some very desirable soil areas are too small in size or too irregular in shape, or their occurrence with less desirable soils form a pattern too complex to be utilized for the intended use. Although not considered in the interpretations, these items should influence the final selection of sites.

The interpretations will not eliminate the need for on site sampling, testing, and study of specific sites for design and construction of engineering works and other uses. Soil survey interpretations are helpful in planning more detailed field investigations to determine the conditions of the soil at the precise site for the intended use. Soil classification, mapping, and interpretation ordinarily apply to the upper 5 or 6 feet.

When interpretations are used in connection with delineated soil areas on soil maps (mapping units), the information pertains to the dominant soil for which the soil is named. Other unlike soils, too small in areas to map out, may be present within the mapped soil area. The percentage of these included soils varies, but typically is 10 percent or less for each and no more than 15 percent total for all included soils that have a different use potential than the named soil. Interpretations do not apply to included soils. More detailed investigations are needed when evaluating small specific sites such as a one-acre lot within a given mapped soil area. For example, a soil mapped as Gloucester sandy loam, 8 to 15 percent slopes, also can include small unmappable areas of Hollis and Sutton soils. The interpretations apply to the Charlton part of the delineated soil area and not to the entire area.

Soil properties do not function independently of each other. The influence of any one soil property depends upon the other soil properties present. The criteria for interpretations are based upon present knowledge and may change in the future with more experience and data.

TABLE A -- ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

This table shows the acreage and proportionate extent for each similar soil area (map unit) in Merrimack County. Acreages of water bodies are also shown in this table. Consult recent census data for this information, if it is needed.

TABLE B1 -- LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

Class Determining Phase--For each phase that significantly influences yield of management, the coordinated capability classification and predicted yields of major cultivated crops, hay, and pasture commonly grown on the soil is listed. Phases that commonly influence yields and management significantly are flooding, drainage slope, texture of surface layer, erosion, and climatic factors.

Capability -- The capability class and subclass for most soils is given. Soil complexes and miscellaneous areas do not have a capability class and subclass.

Predicted Yields -- Where important, the name of the crop is listed. Also, entered is the unit of measure, e.g., (BU), (TONS), (CWT), etc.

TABLE E -- WOODLAND MANAGEMENT AND PRODUCTIVITY

Woodland interpretations are made to help landowners plan the management of their soils for woodland. Each soil is rated according to its estimated tree-producing potential. The hazards and limitations that affect the suitability of soils for woodland are also indicated.

If trees normally do not grow on this soil, a NONE has been entered on the first line in the column "Common Trees". The principal species have been entered in most cases even if they are not important commercially.

Only the first two elements of the ordination symbol--the class and the sub-class have been listed.

There are eight site classes used in Merrimack County. Class 9 is the highest in productivity followed by 8, 7, 6, 5, 4, 3, and 2. Productivity ratings are based on data collected in the New England States and New York. Sub-classes are as follows:

X -- soils having restrictions or limitations for woodland use due to stones or rocks. They may also have limitations due to wetness, shallow depth, sandiness, and relief.

W -- soils where excess water causes limitations for woodland use.

D -- soils with limitations for woodland use due to restricted rooting depth. They may also have limitations due to sandiness or relief.

S -- dry, sandy soils having moderate to severe limitations for woodland use. They may also have limitations due to relief.

R -- soils with limitations for woodland use due only to steepness of slope.

A -- soils with slight limitations for woodland use.

Erosion hazard -- refers to the potential for soil erosion following cutting operations where soil is exposed along roads, skid trails, fire lanes, and log decking areas. Ratings are: Slight -- problems of erosion control are relatively unimportant; Moderate -- some attention must be given to prevent unnecessary soil erosion; and Severe -- intensive treatment, specialized equipment, and methods of operation are necessary to minimize soil erosion.

Equipment limitations -- refers to the degree to which soil and topographic features restrict use of equipment commonly used in tree harvesting. Ratings are: Slight -- equipment use is not restricted in kind or time of the year; Moderate -- equipment use is somewhat restricted; and Severe -- special equipment is needed and its use is severely restricted.

Seedling mortality -- refers to the failure of seedlings to grow after adequate natural seeding or after suitable seedlings are planted. Ratings are: Slight -- expected mortality is 0-25 percent; Moderate -- expected mortality is 25-50 percent; and Severe -- expected mortality is more than 50 percent.

Windthrow hazard -- refers to the soil characteristics that control tree root development and affect tree wind firmness. Ratings are: Slight -- no special problems--trees are expected to remain wind firm when released on all sides; Moderate -- root development is adequate for stability except during periods of excessive wetness or during periods of strong winds; and Severe -- depth of tree roots does not give adequate stability and individual trees would be expected to blow over when released on all sides.

Common trees -- listed are common species that would be managed for wood crop production. They are not listed in order of preference.

Site index -- site index for a given soil and tree is the average total height attained by dominant and co-dominant trees at a specific age. In New Hampshire, the base age is 50 years.

Productivity class -- the productivity class is a derivative of the site index and is used as the ordination symbol for the key common tree species for that soil.

Trees to plant -- listed are species suitable for open field and woodland interplanting. Only those species commonly planted and available for planting are listed. They are not listed in order of preference.

Windbreaks -- the important windbreak and environmental planting tree species and expected height at 20 years have been listed for a few soils. Since windbreaks are not prevalent in New Hampshire, this use category has been left blank for most of the soils.

TABLE F -- WILDLIFE HABITAT

There are but a few direct relationships between the kind of soil and wildlife species. Therefore, this table deals with relationships between kinds of soil and kinds of plant and water developments that make up wildlife habitat. Each soil is rated for its suitability for the improvement, maintenance, or creation of specific wildlife elements. Each kind of soil is rated for grain and seed crops, domestic grasses and legumes, wild herbaceous plants, hardwood trees, coniferous plants, wetland plants, and shallow water areas.

The levels of suitability or potential for habitat elements are expressed by an adjective rating as follows:

Good -- Habitats are easily improved, maintained, or created. There are few or no soil limitations in habitat management and satisfactory results can be expected.

Fair -- Habitats can be improved, maintained, or created on these soils, but moderate soil limitations affect habitat management or development. A moderate intensity of management and fairly frequent attention may be required to insure satisfactory results.

Poor -- Habitats can be improved, maintained, or created on these soils, but the soil limitations are severe. Habitat management may be difficult and expensive and require intensive effort. Results are questionable.

Very Poor -- Under the prevailing soil conditions, it is impracticable to attempt to improve, maintain, or create habitats. Unsatisfactory results are probable.

POTENTIAL AS HABITAT

The potential as habitat for the following kinds of wildlife are indicated in this section.

Open Wildlife -- Birds and mammals that normally frequent cropland, pastures, meadows, lawns, and areas overgrown with grasses, forbs, and shrubs. Examples are pheasant, mourning doves, meadowlarks, field sparrows, field mice, red foxes, and woodchucks. Openland wildlife ratings are based on the suitability of soils for grain and seed crops, domestic grasses and legumes, wild herbaceous plants, and hardwood trees or coniferous plants.

Woodland Wildlife -- Birds and mammals that normally frequent wooded areas of coniferous and hardwood trees and shrubs or mixtures of such plants. Examples are ruffed grouse, woodcock, thrushes, vireos, scarlet tanagers, whitetailed deer, moose, black bear, bobcats, porcupine, fisher, raccoons, snowshoe hare, gray squirrels, and red squirrels. Woodland wildlife ratings are based on the suitability of soils for domestic grasses and legumes, wild herbaceous plants, and hardwood trees or coniferous plants.

Wetland Wildlife -- Birds and mammals that normally frequent wet areas such as ponds, marshes, and swamps. Examples are black ducks, woodcock, herons, shore birds, beaver, mink, otter, muskrat, turtles and frogs. Wetland wildlife ratings are based on suitability of soils for wetland plants and shallow water areas.

To Avoid Confusion: Certain points are essential to an understanding of the use and meaning of this table. Present land use and existing vegetation are not considered in the rating system. Those factors are subject to change and, important as they might be to the game manager, they cannot be obtained from the soil survey.

TABLE H -- ENGINEERING INDEX PROPERTIES

Information presented in this table consists of estimates and commonly does not represent actual test data. The estimates are based on engineering tests on selected benchmark soils and criteria set forth in engineering guides.

Depth from Surface -- This column gives the depth in inches from the surface for the major horizons or layers in the undisturbed soil.

U.S.D.A. Texture -- The U.S.D.A. texture is based on the relative amounts of sand, silt, and clay in a mass of soil giving rise to soil textural classes such as loamy sand, sandy loam, loam, etc. The proportions of sand, silt, and clay in the major soil textural classes is given in the following table:

TEXTURE CLASS	PERCENTAGES SAND	SILT	CLAY
Sand	+85	-15	-10
Loamy sand	70-90	-30	-15
Sandy loam	43-85	-50	-20
Sandy clay loam	45-80	-28	20-35
Clay loam	20-45	15-53	27-40
Sandy clay	45-65	-20	35-55
Loam	23-52	28-50	7-27
Silt loam	20-50	50-80	12-27
Silt	-20	+80	-12
Silty clay loam	-20	40-73	27-40
Silty clay	-20	40-60	40-60
Clay	-45	-40	+40

+ = more than
- = less than

KEY TO USDA TEXTURE

Modifier	Abbreviation
MUCKY	-- MK
CHANNERY	-- CN
VERY CHANNERY	-- CNV
GRAVELLY	-- GR
VERY GRAVELLY	-- GRV
EXTREMELY GRAVELLY	-- GRX
VERY STONY	-- STV
EXTREMELY STONY	-- STX
VERY BOULDERY	-- BYV
EXTREMELY BOULDERY	-- BYX

Texture Class	Abbreviation
VERY COARSE SAND	-- VCOS
COARSE SAND	-- COS
SAND	-- S
FINE SAND	-- FS
VERY FINE SAND	-- VFS
LOAMY COARSE SAND	-- LCOS
LOAMY SAND	-- LS
LOAMY FINE SAND	-- LFS
LOAMY VERY FINE SAND	-- LVFS
SANDY LOAM	-- SL
FINE SANDY LOAM	-- FSL
VERY FINE SANDY LOAM	-- VFSL
LOAM	-- L
SILT	-- SI
SILT LOAM	-- SIL
CLAY LOAM	-- CL
SILTY CLAY LOAM	-- SICL
SANDY CLAY LOAM	-- SCL
SILTY CLAY	-- SIC
CLAY	-- C

Unified Classification -- The unified soil classification system is based on identification of soils according to their texture nd plasticity and their performance as engineering construction material (U.S. Department of Defense, 1968 Unified Soil Classification System for Roads, Airfields, Embankments, and Foundations. MIL-STD-619B, 30 pp., illus.) In this system, soil material is grouped into 15 classes; 8 classes are for coarse grained material (GW, GP, GM, GC, SW, SP, SC, SM), 6 for fine grained material (ML, CL, PL, MH, CH, OH), and 1 for organic material (Pt). Soils on the borderline between two classes are designated by symbols for both classes; for example, SP-SM.

AASHTO Classification -- The AASHTO system is used to classify soils according to the properties that affect use in highway and maintenance construction. This system is based on gradation, liquid limit, and plasticity index of the soil. The seven basic groups range from A-1 (gravelly soils of high bearing capacity, the best soils for subgrades) to A-7 (clayey soils having low strength when wet, the poorest soil for subgrades). (American Association of State Highway Officials, 1961 Standard Specifications for Highway Materials and Methods of Sampling and Testing, Ed. 8, 2 v., illus.)

Fraction Less Than 3 in. (Pct) -- The weight percentage of material greater than 3 inches is listed. Values may be estimated to the nearest 5 percent where data are lacking for more precise estimates. For organic soils, the volume of woody fragments is listed.

Percentage Less Than 3 Inches Passing Sieve No. -- The estimated percentages of material passing the number 4 (4.76 mm), 10 (2.0 mm), 40 (0.5 mm) and the 200 (0.75 mm) is given for each major horizon. When there is very little gravel size material (No. 4 and 10 sieve) present, the percent passing the 200 sieve approximates the amount of silt and clay in the U.S.D.A. Soil Classification system. Values are rounded off to the nearest 5 percent. A range is listed to cover the variability of a given soil throughout the State.

Liquid Limit -- The moisture content at which the soil passes from a plastic to a liquid state.

Plasticity Index -- The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

TABLE J -- PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

The information below defines and explains each table column.

Permeability -- Values listed represent the estimated rate of downward movement of water through undisturbed and uncompacted soil. It does not include lateral seepage or upward movement under artesian pressure. The estimates are based mainly on structure and porosity of the soil and on tests of undisturbed cores of similar soils. The permeability classes and the inches per hour for each class is listed below:

Permeability Class	Inches Per Hour
Slow or very slow	Less than 0.2
Moderately slow	0.2 - 0.7
Moderate	0.6 - 2.0
Moderately rapid	2.0 - 6.0
Rapid or very rapid	More than 6.0

Available Water Capacity -- The available water capacity is given in inches per inch of soil for the major horizons. It represents the approximate amount of capillary water in the soil available for plant growth after all free water has drained away. Estimates of the available water capacity for wet (poorly and very poorly drained) soils may appear meaningless until one considers artificial drainage or lowering of the water table.

Soil Reaction (pH) -- Soil reaction or the intensity of soil acidity or alkalinity is expressed in pH values. A pH of 7.0 is neutral in reaction because it is neither acid nor alkaline. Lower values indicate acidity and higher values show alkalinity.

Shrink-Swell Potential -- Indicates the degree of volume change to be expected with a change in moisture content. It is estimated primarily on the basis of the amount and type of clay present. Four classes, low, medium, high, and very high are used to express shrink-swell. They are relative ratings and do not carry any quantitative values at present.

Erosion Factors:

K, the soil erodibility factor, is the soil loss rate per erosion index unit for a specified soil as measured on a unit plot, which is defined as a 72.6-ft. length of uniform 9 percent slope continuously in clean-tilled fallow.

T, soil loss tolerance, is the maximum amount of soil loss, in tons per acre per year, that can be tolerated and still achieve a degree of conservation needed for sustained economic production in the foreseeable future with present technology. It is important in the use of the soil loss equation even though it does not appear in the equation itself.

TABLE K1 -- WATER FEATURES

These tables contain information for water and soil features for all the soils in Merrimack County. Listed below are definitions and explanations for each table column:

Hydrologic Group -- The hydrologic grouping of soils is based on infiltration rates as they affect runoff. The four groups are described as follows:

Group A -- Soils having infiltration rates even when thoroughly wetted. These consist chiefly of deep, well to excessively drained sands or gravel. These soils have a high rate of water transmission and would result in low runoff potential.

Group B -- Soils having moderate infiltration rates when thoroughly wetted. These consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.

Group C -- Soils having slow infiltration rates when thoroughly wetted. These consist chiefly of: (1) soils with a layer that impedes the downward movement of water, or (2) soils with moderately fine to fine texture, or (3) soils with a moderately high water table (poorly drained). These soils have a slow rate of water transmission.

Group D -- Soils having very slow infiltration rates when thoroughly wetted. They consist chiefly of: (1) clay soils with a high swelling potential, (2) soils with a permanent high water table (very poorly drained), (3) soils with a clay pan or a clay layer at or near the ground surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

Flooding -- An expression of flood frequency from nearby streams. Estimates are based on characteristics of the soil. There is no attempt to define flooding as to depth or velocity. Ratings are defined as follows:

None	--	No reasonable possibility of flooding or flooding unlikely.
Rare	--	Floods at least once in 20 years.
Occasional	--	Floods at least once in 2 to 10 years.
Frequent	--	Floods at least once in 2 years or less.
Common	--	Occasional and frequent classes can be grouped for certain purposes and called common flooding.

Duration Classes: Average duration of inundation per flood occurrence is given only for common frequency classes.

Very brief - Less than 2 days.

Brief - Two to 7 days.

Long - Seven days to 1 month.

Very Long - More than 1 month.

Time of the year: The time of the year that floods are likely to occur are impressed in months, for example, February-April.

Time and duration of the flood are the most critical factors determining the growth and survival of a given species. Flooding during the dormant season has few, if any, harmful effects on plant growth or mortality. But if flooding occurs long enough during the growing season, the plant soon runs out of oxygen and suffers damage or death.

Depth to Seasonal High Water Table (Ft.) -- Expressed as a range in feet to the nearest one-half foot. Estimates are based on observed characteristics of the soil to a depth of 6 feet.

Kind:	Apparent --	A water table not perched by a restrictive layer.
Months:	Perched --	A water table that has been held up by a restrictive layer; usually hardpan.

Restrictive Features -- The restrictive features used for each use are listed below. Some of the restrictive features terms are self-explanatory; others need explanation to help readers make maximum use of the information. The following is a list of terms and definitions:

AREA RECLAIM	Area difficult to reclaim after the removal of soil for construction and other uses.
CEMENTED PAN	Cemented pan too close to surface.
COMPLEX SLOPE	Irregular or variable slope. Planning or constructing terraces, diversions, and other water control measures on a complex slope is difficult.
CUTBANKS CAVE	The walls f excavations tend to cave in or slough.
DEEP TO WATER	Deep to permanent water table during dry season.
DENSE LAYER	A very firm, passive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

DEPTH TO BEDROCK	Bedrock is too near the surface for the specified use.
DROUGHTY	Soil holds too little water for plants during dry periods.
ERODES EASILY	Water erodes soil easily.
EXCESS FINES	Excess silt and clay in the soil. The soil does not provide a source of gravel or sand for construction purpose.
EXCESS HUMUS	Too much organic matter.
EXCESS SALT	Excess water-soluble salts in the soil that restrict the growth of most plants.
EXCESS SULFUR	Excessive amount of sulfur in the soil. The sulfur causes extreme acidity if the soil is drained, and the growth of most plants is restricted.
FAST INTAKE	The rapid movement of water into the soil.
FAVORABLE	Features of the soil are favorable for the intended use.
FLOODING	Soil flooded by moving water from stream overflow, runoff, or high tides.
FRAGILE	Soil that is easily damaged by use or disturbance.
FROST ACTION	Freezing and thawing of soil moisture. Frost action can damage roads, buildings, and other structures.
HARD TO PACK	Difficult to compact.
LARGE STONES	Rock fragments 3 inches (7.5 centimeters) or more across. Large stones adversely affect the specified use of the soil.
LOW STRENGTH	The soil is not strong enough to support loads.
NO WATER	Too deep to ground water.
PERCS SLOWLY	The slow movement of water through the soil adversely affecting the specified use.
PIPING	Formation of subsurface tunnels or pipe like cavities by water moving through the soil.
PITTING	Pits caused by melting ground ice.

PONDING	Standing water on soils in closed depressions. The water can be removed only by percolation or evapotranspiration.
POOR FILTER	Because of rapid permeability, the soil may not adequately filter effluent from a waste disposal system.
POOR OUTLETS	Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.
ROOTING DEPTHS	Shallow root zone. The soil is shallow over a layer that greatly restricts roots.
SALTY WATER	Water that is too salty for consumption by livestock.
SEEPAGE	The movement of water through the soil. Seepage adversely affects the specified use.
SHRINK-SWELL	The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.
SLOPE	Slope is great enough that special practices are required to insure satisfactory performance of the soil for a specified use.
SLIPPAGE	The soil is susceptible to movement downslope when loaded, excavated, or wet.
SLOW INTAKE	The slow movement of water into the soil.
SLOW REFILL	The slow filling ponds, resulting from restricted permeability in the soil.
SMALL STONES	Rock fragments less than 3 inches (7.5 centimers) in diameter. Small stones adversely affect the specified use of the soil.
SUBSIDES	Settlement of organic soils or of soils containing semifluid layers.
THIN LAYER	Otherwise suitable soil material too thin for the specified use.
TOO ACID	The soil is so acid that growth of plants is restricted.
TOO CLAYEY	Soil slippery and sticky when wet and slow to dry.
TOO SANDY	Soil soft and loose; droughty and low in fertility.
UNSTABLE FILL	Risk of caving or sloughing on banks of fill material.
WETNESS	Soil wet during period of use.

TABLE L -- SANITARY FACILITIES

The nature of the soil is important in selecting sites for septic tank absorption fields, sewage lagoons, and sanitary landfills, and in identifying limiting soil properties and site features to be considered in planning, design, and installation. Those soil properties that determine the ease of excavation or installation of these facilities will also affect the ratings.

Soil limitation ratings of slight, moderate, or severe are given for septic tank absorption fields, sewage lagoons, and trench and area type sanitary landfills. Soil suitability ratings of good, fair, and poor are given for daily cover for landfill.

(a) Septic tank absorption fields are subsurface systems of tile or perforated pipe that distribute effluent from a septic tank into the natural soil. The centerline depth of the tile is assumed to be at a depth of 24 inches. Only the soil between depth of 24 and 72 inches is considered in making the ratings. The soil properties and site features considered are those that affect the absorption of the effluent, those that affect the construction of the system, and those that may affect public health.

Properties and features that affect the absorption of the effluent are permeability, depth to seasonal high water table, depth to bedrock, cemented pan or ice, and susceptibility to flooding. Stones, boulders, and a shallow depth to bedrock, ice, or cemented pan interfere with installations. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas. Also, soil erosion and soil slippage are hazards where absorption fields are installed in sloping soils.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth less than 4 feet below the distribution lines. In these soils, the absorption field may not adequately filter the effluent, and as a result, ground water supplies in the area may be contaminated. Soils having a hazard of inadequate filtration are to be noted.

(b) Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons have a nearly level floor surrounded by cut slopes or embankments of compacted, relatively impervious soil material. Aerobic lagoons generally are designed so that depth of the sewage is 2 to 5 feet. Relatively impervious soil for the lagoon floor and sides is desirable to minimize seepage and contamination of local ground water.

Soil permeability is a critical property in evaluating a soil for sewage lagoons. Most porous soils will eventually seal when being used as a sewage lagoon, however, until they do, the hazard of pollution is great and it is difficult to maintain the constant water depth required for proper operation. Soils with a permeability exceeding 2 inches per hour are generally to porous for proper operation of sewage lagoons and may cause contamination of shallow wells. Fractured bedrock within 40 inches may create a pollution hazard. Bedrock and cemented pans create construction problems.

TABLE M -- BUILDING SITE DEVELOPMENT

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance, and maintenance.

Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, lawns, landscaping, and golf fairways.

(a) Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewer lines, telephone and power transmission lines, basements, open ditches, grave sites, and the like. The excavations are most commonly made by trenching machines or backhoes.

The ratings are based on the soil properties that influence ease of digging and the resistance to sloughing. Depth and hardness of bedrock or cemented pan, the bulk density of the soil and the amount of large stones influence the ease of digging, filling, and compacting. Depth to the seasonal high water table and flooding may restrict the time that the excavations can be made. Slope influences the ease of using digging machines. Soil texture and depth to water table influence the resistance to sloughing.

(b) Dwellings without basements are single-family houses of three stories or less without basements. The foundation is assumed to be spread footing of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs. The properties affecting soil strength and settlement are presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soils. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of coarse fragments.

(c) Dwellings with basements are single-family houses of three stories or less with basements. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings are based on properties affecting soil strength and settlement under a load and those that affect excavation and construction costs. The properties affecting soil strength and settlement are the presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soil. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of coarse fragments.

(d) Small commercial building. Limitation ratings are given for undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

The ratings are based on properties affecting soil strength and settlement under a load and those that affect excavation and construction costs. The properties affecting soil strength and settlement are the presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soil. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of coarse fragments.

(e) Local roads and streets. Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing--commonly of asphalt or concrete--and that are expected to carry automobile traffic all year. The roads and streets consist of (1) the underlying local soil material, whether cut or fill, that is called "the sub-grade", (2) the base material, lime-stabilized soil, soil-cement stabilized soils, gravel or crushed rock, and (3) the actual road surface or street pavement that is either flexible (asphalt), rigid (concrete), or gravel with binder in it. These roads and streets are graded to shed water and conventional drainage measures are provided. With probable exception of the hard surface, the roads and streets are built mainly from the soil at hand.

The properties that affect local roads and streets are those that influence the ease of excavation and grading, and traffic supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or cemented pan, depth to water table, flooding, the amount of large stones, and slope. The properties that affect traffic supporting capacity are soil strength as inferred from AASHTO group index and the Unified classification, shrink-swell behavior, potential frost action, and depth to high water table. Soil slippage may be a problem on certain sloping soils.

TABLE N -- CONSTRUCTION MATERIAL

Suitability ratings of good, fair, or poor are given for soils used as a source of roadfill and topsoil. Ratings of probable and improbable are given for sand and gravel.

(a) Roadfill. Roadfill consists of soil material that is excavated from its original position and used in road embankments elsewhere. The evaluations for roadfill are for low embankments generally less than 6 feet and are less exacting in design than high embankments such as used in superhighways. The rating is given for the whole soil, from the surface to a depth of about 5 feet, based on the assumption that soil horizons will be mixed in loading, dumping, and spreading. Soils are rated as to the amount of material available for excavation, the ease of excavation, and how well the material performs after it is in place.

Soil properties that affect the amount of material available for excavation are thickness of suitable material above bedrock or other material that is not as suitable. The percent of coarse fraction greater than 3 inches, depth to high water table and slope are properties that influence the ease of excavation. How well the soil performs in place is indicated by the AASHTO classification and group index and the shrink-swell potential. Some damages to the borrow area are expected, but if revegetation and erosion control could become serious problems, then the soil is rated severe.

(b) Sand. Sand as a construction material is usually defined as the size of particles ranging from .075 mm (sieve #200) to 4.75 mm (sieve #4) in diameter. Sand is used in greater quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the sand for specific purposes is not evaluated.

The properties used to evaluate the soils as a probable source for sand are the grain size as indicated by the Unified Soil Classification, the thickness of the sand layer, and the amount of rock fragments in the soil material.

(c) Gravel. Gravel as a construction material is defined as the size of particles ranging from 4.76 mm (sieve #4) to 76 mm (3 inches) in diameter. Gravel is used in great quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the gravel for specific purposes is not evaluated.

The properties used to evaluate the soil as a probable source for gravel are grain size as indicated by the Unified Soil Classification, the thickness of the gravel layer and the amount of rock fragments in the soil material. If the lowest layer of the soil contains gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the gravel layer below the depth of observation exceeds the minimum thickness.

(d) Topsoil. The term "topsoil" has several meanings, but as used here, the term describes soil material used to cover an area so as to improve soil conditions for establishment and maintenance of adapted vegetation.

Generally, the organic rich upper part of the soil is most desirable; however, material excavated from deeper layers is also used. In this rating, the upper 40 inches of soil material is evaluated for its use as topsoil. In the borrow areas, the material below 40 inches is evaluated for its suitability to grow vegetation after the upper 40 inches is removed.

The soil properties that are used to rate the soil as topsoil are those that influence plant growth, the ease of excavation, loading and spreading, and those which influence the reclamation of the borrow area.

The physical and chemical soil properties that influence plant growth are the presence of toxic substances, soil reaction, and those properties which are inferred from the soil texture such as available water capacity and fertility. The properties that influence the ease of excavation, loading, and spreading are the amounts of rock fragments, slope, depth to the water table, soil texture, and thickness of suitable material. The properties that influence the reclamation of the borrow area are slope, depth to water table, amount of rock fragments, depth to rock, and the presence of toxic material.

TABLE Y -- PRIME FARMLAND

This table shows those map units that qualify for prime farmland. These soils have properties that meet National criteria for prime farmland.

EXPLANATION OF TERMINOLOGY

Consistence, soil -- the feel of the soil and the ease with which a lump can be crushed by the fingers.

Excessively drained -- water is removed from the soil very rapidly and little is retained within the soil to supply the needs of plants.

Fine texture -- general term used to describe texture of the soil. A fine textured soil has 35 percent or more clay and has a moderate to very sticky feel when moist.

Hardpan (fragipan) -- a compact soil layer high in silt and very fine sand and generally low in clay. It is quite dense and has very little pore space. The hardpan retards the downward movement of water and roots. Permeability is moderately slow to slow. When dry, the layers are very hard and difficult to dig, but when moist, they may be somewhat easier to dig.

Horizon, soil -- a layer of soil, approximately parallel to the soil surface, with characteristics produced by soil-forming processes.

Infiltration -- the process involved when water soaks into the soil through the surface of the ground.

Moderately well drained -- water is removed from the soil somewhat slowly, so that the soil is wet for a small, but significant part of the time. A moderately well drained soil generally has a seasonal high water table within 1 to 3 feet of the ground surface that keeps the soil wet from late fall to early spring.

Moderately fine texture -- general term used to describe texture of the soil. Soil has 20 to 40 percent clay and is generally moderately sticky when moist.

Poorly drained -- water is removed so slowly that the soil remains wet for a large part of the time. A poorly drained soil has a water table near the ground surface that keeps the soil wet for 7 to 9 months of the year.

Seasonal high water table -- the highest part of the soil or highest level at which the water stands for a significant period of time during wet seasons.

Shallow soils -- a soil that formed in a thin (10 to 20 inches) mantel of soil material over bedrock.

Slope -- the slopes of the land is expressed in terms of percent. This is the number of feet fall or rise per 100 feet of horizontal distance. Slope classes are designated as follows:

A -- 0 to 3 percent slopes
B -- 3 to 8 percent slopes
C -- 8 to 15 percent slopes
D -- 15 to 25 percent slopes
E -- 25 to 35 percent slopes
F -- 35 percent plus slopes (not normally used)

Soil Structure -- refers to the aggregation of grouping of soil particles. It is descriptive of the gross, overall aggregation or arrangement of the soil solids.

Very poorly drained -- water is removed from the soil so slowly that the water table remains at or on the ground surface most of the year.

Well-drained -- water is removed from the soil readily, but not rapidly. The seasonal high water table is generally more than 3 feet below the ground surface during wet seasons. An exception are the soils formed in dense basal till (hardpan) which are called well drained, but have a seasonal high water table for a few weeks in the spring of the year normally less than 3 feet below the ground surface.

REV: H. R. Mount
December 1986

TABLE A.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

Map symbol	Soil name	Acres	Percent
AcB	Acton fine sandy loam, 0 to 8 percent slopes	2,037	0.3
AdB	Acton very stony fine sandy loam, 0 to 8 percent slopes	2,869	0.5
AdC	Acton very stony fine sandy loam, 8 to 15 percent slopes	1,525	0.2
AfA	Agawam very fine sandy loam, 0 to 3 percent slopes	920	0.2
AfB	Agawam very fine sandy loam, 3 to 8 percent slopes	1,321	0.2
AgA	Au Gres fine sandy loam, 0 to 3 percent slopes	873	0.1
AgB	Au Gres fine sandy loam, 3 to 8 percent slopes	655	0.1
AuB	Au Gres loamy sand, 0 to 8 percent slopes	3,121	0.5
BcB	Belgrade silt loam, 0 to 8 percent slopes	253	*
CaC	Canaan-Herman very rocky sandy loams, 3 to 15 percent slopes	1,290	0.2
CaD	Canaan-Hermon very rocky sandy loams, 15 to 25 percent slopes	283	*
ChD	Canaan-Hermon extremely rocky sandy loams, 8 to 25 percent slopes	1,918	0.3
ChE	Canaan-Herman extremely rocky sandy loams, 25 to 60 percent slopes	597	0.1
CoA	Colton loamy sand, 0 to 3 percent slopes	509	0.1
CoB	Colton loamy sand, 3 to 8 percent slopes	1,840	0.3
CoC	Colton loamy sand, 8 to 15 percent slopes	734	0.1
CtE	Colton gravelly loamy sand, 15 to 60 percent slopes	1,392	0.2
DuB	Duane fine sandy loam, 0 to 8 percent slopes	857	0.1
GcB	Gloucester sandy loam, 3 to 8 percent slopes	7,660	1.3
GcC	Gloucester sandy loam, 8 to 15 percent slopes	4,635	0.8
GcD	Gloucester sandy loam, 15 to 25 percent slopes	1,619	0.3
GrB	Gloucester very stony sandy loam, 3 to 8 percent slopes	19,920	3.3
GrC	Gloucester very stony sandy loam, 8 to 15 percent slopes	23,350	3.8
GrD	Gloucester very stony sandy loam, 15 to 25 percent slopes	5,609	0.9
GrE	Gloucester very stony sandy loam, 25 to 60 percent slopes	1,700	0.3
GsD	Gloucester extremely stony sandy loam, 8 to 25 percent slopes	195,830	31.7
GsE	Gloucester extremely stony sandy loam, 25 to 50 percent slopes	26,100	4.3
Gv	Gravel pits	3,801	0.6
HmB	Hermon sandy loam, 3 to 8 percent slopes	1,725	0.3
HmC	Hermon sandy loam, 8 to 15 percent slopes	1,042	0.2
HmD	Hermon sandy loam, 15 to 25 percent slopes	564	0.1
HnB	Hermon very stony sandy loam, 3 to 8 percent slopes	4,489	0.7
HnC	Hermon very stony sandy loam, 8 to 15 percent slopes	5,260	0.9
HnD	Hermon very stony sandy loam, 15 to 25 percent slopes	1,260	0.2
HoD	Hermon extremely stony sandy loam, 8 to 25 percent slopes	41,961	6.9
HoE	Hermon extremely stony sandy loam, 25 to 60 percent slopes	6,473	1.1
HrE	Hinckley gravelly loamy sand, 15 to 50 percent slopes	6,190	1.0
HsA	Hinckley loamy sand, 0 to 3 percent slopes	2,250	0.4
HsB	Hinckley loamy sand, 3 to 8 percent slopes	8,160	1.3
HsC	Hinckley loamy sand, 8 to 15 percent slopes	3,257	0.5
Lm	Limerick silt loam, high bottom	393	0.1
Ma	Made land	1,100	0.2
Mh	Marsh	1,109	0.2
MmA	Merrimac sandy loam, 0 to 3 percent slopes	3,350	0.5
MmB	Merrimac sandy loam, 3 to 8 percent slopes	11,100	1.8
MmC	Merrimac sandy loam, 8 to 15 percent slopes	6,390	1.0
Mn	Mixed alluvial land	3,340	0.5
Mp	Muck and peat	10,900	1.8
NnA	Ninigret very fine sandy loam, 0 to 3 percent slopes	375	0.1
Of	Ondawa fine sandy loam	5,290	0.9
Oh	Ondawa fine sandy loam, high bottom	2,660	0.4
PaB	Paxton loam, 0 to 8 percent slopes	17,400	2.8
PaC	Paxton loam, 8 to 15 percent slopes	10,580	1.7
PaD	Paxton loam, 15 to 25 percent slopes	2,850	0.5
PnB	Paxton very stony loam, 3 to 8 percent slopes	11,275	1.8
PnC	Paxton very stony loam, 8 to 15 percent slopes	19,300	3.2
PnD	Paxton very stony loam, 15 to 25 percent slopes	4,930	0.8
PnE	Paxton very stony loam, 25 to 60 percent slopes	2,800	0.5
Po	Podunk fine sandy loam	2,663	0.4
RbA	Ridgebury loam, 0 to 3 percent slopes	889	0.1
RbB	Ridgebury loam, 3 to 8 percent slopes	459	0.1
RdA	Ridgebury and Whitman very stony loams, 0 to 3 percent slopes	14,520	2.4
RdB	Ridgebury and Whitman very stony loams, 3 to 8 percent slopes	5,515	0.9

See footnote at end of table.

TABLE A.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Acres	Percent
Rh	Riverwash	267	*
Ro	Rock outcrop	242	*
Ru	Rumney fine sandy loam	2,430	0.4
Sa	Saco silt loam	2,482	0.4
Sc	Scarboro fine sandy loam	2,279	0.4
SgB	Shapleigh-Gloucester sandy loams, 3 to 8 percent slopes	1,262	0.2
SgC	Shapleigh-Gloucester sandy loams, 8 to 15 percent slopes	729	0.1
ShC	Shapleigh-Gloucester very rocky sandy loams, 3 to 15 percent slopes	5,720	0.9
ShD	Shapleigh-Gloucester very rocky sandy loams, 15 to 25 percent slopes	1,257	0.2
SoD	Shapleigh-Gloucester extremely rocky sandy loams, 8 to 25 percent slopes	8,500	1.4
SoE	Shapleigh-Gloucester extremely rocky sandy loams, 25 to 60 percent slopes	2,650	0.4
SuA	Sudbury fine sandy loam, 0 to 3 percent slopes	1,460	0.2
SuB	Sudbury fine sandy loam, 3 to 8 percent slopes	2,341	0.4
Sy	Suncook loamy sand	2,617	0.4
WdA	Windsor loamy sand, 0 to 3 percent slopes	1,499	0.2
WdB	Windsor loamy sand, 3 to 8 percent slopes	3,299	0.5
WdC	Windsor loamy sand, 8 to 15 percent slopes	3,210	0.5
WdE	Windsor loamy sand, 15 to 60 percent slopes	1,399	0.2
WoB	Woodbridge loam, 0 to 8 percent slopes	3,640	0.6
WoC	Woodbridge loam, 8 to 15 percent slopes	522	0.1
WvB	Woodbridge very stony loam, 0 to 8 percent slopes	6,001	1.0
WvC	Woodbridge very stony loam, 8 to 15 percent slopes	2,335	0.4
W	Water (less than 40 acres)	5,400	0.9
WaTER	Water (greater than 40 acres)	16,540	2.7
	Total	611,100	100.0

* Less than 0.1 percent.

TABLE B1.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

(Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Soil name and map symbol	Land capability	Corn silage	Grass-legume hay
		Tons	Tons
AcB---------- Acton	IIe	18	4.0
AdB, AdC-------- Acton	VIs	---	---
AfA---------- Agawam	I	24	4.5
AfB---------- Agawam	IIe	24	4.5
AgA, AgB-------- Au Gres	IIw	22	3.5
AuB---------- Au Gres	IVw	12	3.0
BcB---------- Belgrade	IIe	22	3.5
CaC---------- Canaan-Herman	---	---	---
CaD, ChD-------- Canaan-Hermon	---	---	---
ChE---------- Canaan-Herman	---	---	---
CoA---------- Colton	IIIs	12	2.0
CoB---------- Colton	IIIs	12	2.0
CoC---------- Colton	IVs	---	2.0
CtE---------- Colton	VIIs	---	---
DuB---------- Duane	IIIw	12	2.5
GcB---------- Gloucester	IIe	22	3.5
GcC---------- Gloucester	IIIe	20	3.5
GcD---------- Gloucester	IVe	18	3.0
GrB, GrC, GrD--- Gloucester	VIs	---	---

TABLE B1.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Land capability	Corn silage	Grass-legume hay
		Tons	Tons
GrE---------- Gloucester	VIIs	---	---
GsD, GsE-------- Gloucester	VIIs	---	---
Gv*. Gravel pits			
HmB---------- Hermon	IIe	18	4.0
HmC---------- Hermon	IIIe	16	3.5
HmD---------- Hermon	IVe	14	3.0
HnB, HnC, HnD--- Hermon	VIs	---	---
HoD, HoE-------- Hermon	VIIs	---	---
HrE---------- Hinckley	VIIs	---	---
HsA, HsB-------- Hinckley	IIIs	12	2.0
HsC---------- Hinckley	IVs	---	---
Lm---------- Limerick	IIIw	18	3.5
Ma*. Made land			
Mh*. Marsh			
MmA, MmB-------- Merrimac	IIs	18	3
MmC---------- Merrimac	IIIe	16	3
Mn*. Mixed alluvial land			
Mp*---------- Muck and peat	VIIw	---	---
NnA---------- Ninigret	IIw	22	4.0
Of, Oh---------- Ondawa	I	26	4.0

See footnote at end of table.

TABLE B1.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Land capability	Corn silage	Grass-legume hay
		Tons	Tons
PaB---------- Paxton	IIe	24	4.0
PaC---------- Paxton	IIIe	22	4.0
PaD---------- Paxton	IVe	20	3.5
PnB, PnC-------- Paxton	VIs	---	---
PnD---------- Paxton	VIs	---	---
PnE---------- Paxton	VIIs	---	---
Po---------- Podunk	IIw	24	4.5
RoA, RoB-------- Ridgebury	IVw	---	---
RdA, RdB-------- Ridgebury and Whitman	---	---	---
Rh*. Riverwash			
Ro*. Rock outcrop			
Ru---------- Rumney	IIIw	20	3.5
Sa---------- Saco	VIw	---	---
Sc---------- Scarboro	Vw	---	---
SgB---------- Shapleigh-Gloucester	---	19	3.9
SgC---------- Shapleigh-Gloucester	---	18	3.7
ShC, ShD, SoD--- Shapleigh-Gloucester	---	---	---
SoE---------- Shapleigh-Gloucester	---	---	---
SuA---------- Sudbury	IIw	18	4.0

See footnote at end of table.

TABLE B1.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Land capability	Corn silage	Grass-legume hay
		Tons	Tons
SuB---------- Sudbury	IIe	18	4.0
Sy---------- Suncook	IIIs	12	2.0
WdA, WdB-------- Windsor	IIIs	14	2.5
WdC---------- Windsor	IVs	12	2.5
WdE---------- Windsor	VIIs	---	---
WoB---------- Woodbridge	IIe	24	4.0
WoC---------- Woodbridge	IIIe	22	4.0
WvB, WvC-------- Woodbridge	VIs	---	---
W*. Water (less than 40 acres)			
WaTER*. Water (greater than 40 acres)			

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY

(Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available)

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
AcB, AdB, AdC---: Acton	6A	Slight	Slight	Slight	Moderate	Eastern white pine--	55	6	Eastern white pine, red pine, white spruce.
						Northern red oak----	60	3	
						Red maple----------	55	2	
AfA, AfB--------: Agawam	9A	Slight	Slight	Slight	Slight	Eastern white pine--	70	9	Eastern white pine.
						Northern red oak----	65	3	
						Red pine----------	70	3	
						Sugar maple---------	---	--	
AgA, AgB--------: Au Gres	8A	Slight	Slight	Slight	Slight	Eastern white pine--	68	8	Eastern white pine, white spruce, European larch, balsam fir.
						White spruce--------	51	8	
						Sugar maple---------	63	3	
						Balsam fir----------	51	7	
						Paper birch---------	58	4	
						Red spruce----------	49	7	
AuB----------: Au Gres	3W	Slight	Moderate	Slight	Moderate	Red maple----------	65	3	White spruce, eastern white pine.
						White ash----------	---	--	
						Eastern cottonwood--	---	--	
						Bitternut hickory---	---	--	
						Hackberry----------	---	--	
						American basswood---	56	2	
						Eastern white pine--	64	9	
BcB----------: Belgrade	3A	Slight	Slight	Slight	Slight	Northern red oak----	62	3	Eastern white pine, European larch, white spruce.
						Eastern white pine--	75	10	
						White spruce--------	65	10	
CaC**:									
Canaan---------:	2D	Slight	Slight	Moderate	Severe	Sugar maple---------	50	2	Eastern white pine, red pine, white spruce, balsam fir.
						White spruce--------	55	9	
						Balsam fir----------	60	8	
						Red spruce----------	40	5	
Herman---------:	6A	Slight	Slight	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	
CaD**, ChD**:									
Canaan---------:	2D	Moderate	Moderate	Moderate	Severe	Sugar maple---------	50	2	Eastern white pine, red pine, white spruce, balsam fir.
						White spruce--------	55	9	
						Balsam fir----------	60	8	
						Red spruce----------	40	6	
Hermon---------:	8R	Moderate	Moderate	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
ChE**:									
Canaan	2R	Severe	Severe	Moderate	Severe	Sugar maple	50	2	Eastern white pine, red pine, white spruce, balsam fir.
						White spruce	55	9	
						Balsam fir	60	8	
						Red spruce	40	6	
Herman	8R	Severe	Severe	Slight	Slight	Eastern white pine	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak	55	3	
						Red pine	60	6	
						White spruce	55	9	
CoA, CoB, CoC Colton	8S	Slight	Slight	Severe	Slight	Eastern white pine	62	8	Eastern white pine, red pine.
						Red pine	52	5	
						Red spruce	39	6	
						Sugar maple	61	3	
						White spruce	52	8	
CtE Colton	8R	Moderate	Severe	Severe	Slight	Eastern white pine	62	8	Eastern white pine, red pine.
						Red pine	52	5	
						Red spruce	39	6	
						Sugar maple	61	3	
						White spruce	52	8	
DuB Duane	8A	Slight	Slight	Slight	Slight	Eastern white pine	65	8	Eastern white pine, red pine, white spruce, European larch.
						Red pine	65	8	
						Northern red oak	60	3	
						Red spruce	45	7	
						White spruce	55	9	
GcB, GcC Gloucester	9A	Slight	Slight	Slight	Moderate	Eastern white pine	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir	55	8	
						White spruce	55	9	
						Sugar maple	55	2	
						Paper birch	71	4	
GcD Gloucester	9R	Moderate	Moderate	Slight	Moderate	Eastern white pine	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir	55	8	
						White spruce	55	9	
						Sugar maple	55	2	
						Paper birch	71	4	
GrB, GrC Gloucester	9A	Slight	Slight	Slight	Moderate	Eastern white pine	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir	55	8	
						White spruce	55	9	
						Sugar maple	55	2	
						Paper birch	71	4	
GrD Gloucester	9R	Moderate	Moderate	Slight	Moderate	Eastern white pine	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir	55	8	
						White spruce	55	9	
						Sugar maple	55	2	
						Paper birch	71	4	
GrE Gloucester	9R	Severe	Severe	Slight	Moderate	Eastern white pine	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir	55	8	
						White spruce	55	9	
						Sugar maple	55	2	
						Paper birch	71	4	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
GsD---------- Gloucester	9X	Moderate	Moderate	Moderate	Moderate	Eastern white pine--	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir----------	55	8	
						White spruce--------	55	9	
						Sugar maple---------	55	2	
						Paper birch---------	71	4	
GsE---------- Gloucester	9R	Severe	Severe	Moderate	Moderate	Eastern white pine--	69	9	Eastern white pine, white spruce, balsam fir.
						Balsam fir----------	55	8	
						White spruce--------	55	9	
						Sugar maple---------	55	2	
						Paper birch---------	71	4	
HmB, HmC-------- Hermon	8A	Slight	Slight	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	
HmD---------- Hermon	8R	Moderate	Moderate	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	
HnB, HnC-------- Hermon	8A	Slight	Slight	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	
HnD---------- Hermon	8R	Moderate	Moderate	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	5	
						White spruce--------	55	9	
HoD---------- Hermon	8X	Moderate	Moderate	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	6	
						White spruce--------	55	9	
HoE---------- Hermon	8R	Severe	Severe	Slight	Slight	Eastern white pine--	63	8	Eastern white pine, red pine, white spruce.
						Northern red oak----	55	3	
						Red pine----------	60	5	
						White spruce--------	55	9	
HrE---------- Hinckley	7R	Severe	Severe	Severe	Slight	Eastern white pine--	60	7	Eastern white pine.
						Northern red oak----	49	2	
						Red pine----------	58	6	
						Sugar maple---------	57	2	
HsA, HsB, HsC--- Hinckley	7S	Slight	Slight	Severe	Slight	Eastern white pine--	60	7	Eastern white pine.
						Northern red oak----	49	2	
						Red pine----------	58	6	
						Sugar maple---------	57	2	

See footnote at end of table.

2. Eligibility. Presented to personnel assigned to RESTORON 5.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
Lm Limerick	3W	Slight	Severe	Moderate	Severe	Red maple	65	3	Eastern white pine, white spruce.
						Eastern white pine	65	8	
						White spruce	55	9	
						Red spruce	45	7	
						Elm	---	--	
						Eastern hemlock	---	--	
						Gray birch	---	--	
						Sugar maple	---	--	
						Balsam fir	---	--	
						Tamarack	---	--	
MmA, MmB, MmC Merrimac	2S	Slight	Slight	Moderate	Slight	Northern red oak	51	2	Eastern white pine, red pine.
						Eastern white pine	64	8	
						Sugar maple	58	3	
Mp** Muck and peat	2W	Slight	Severe	Severe	Severe	Black spruce	15	2	
						Balsam fir	39	5	
						Tamarack	---	--	
NnA Ninigret	10A	Slight	Slight	Slight	Slight	Eastern white pine	75	10	Eastern white pine, white spruce.
						Red pine	71	9	
						Red maple	60	3	
						Northern red oak	65	3	
						Sugar maple	55	2	
Of Ondawa	7A	Slight	Slight	Severe	Slight	Eastern white pine	57	7	Eastern white pine, white spruce, red pine.
						Northern red oak	60	3	
						Red pine	65	8	
						Red spruce	45	7	
						Sugar maple	55	2	
Oh Ondawa	7A	Slight	Slight	Slight	Slight	Eastern white pine	57	7	Eastern white pine, white spruce, red pine.
						Northern red oak	60	3	
						Red pine	65	8	
						Red spruce	45	7	
						Sugar maple	55	2	
PaB, PaC Paxton	3A	Slight	Slight	Moderate	Slight	Northern red oak	65	3	Red pine, eastern white pine, Norway spruce, European larch.
						Red pine	67	8	
						Eastern white pine	66	8	
						Sugar maple	75	3	
PaD Paxton	3R	Moderate	Moderate	Moderate	Slight	Northern red oak	65	3	Red pine, eastern white pine, Norway spruce, European larch.
						Red pine	67	8	
						Eastern white pine	66	8	
						Sugar maple	75	3	
PnB, PnC Paxton	8A	Slight	Slight	Slight	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, balsam fir.
						Balsam fir	58	8	
						Red spruce	48	7	
						Sugar maple	60	3	
PnD Paxton	8R	Moderate	Moderate	Slight	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, balsam fir.
						Balsam fir	58	8	
						Red spruce	48	7	
						Sugar maple	60	3	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
PnE: Paxton	8R	Severe	Severe	Slight	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, balsam fir.
						Balsam fir	58	8	
						Red spruce	48	7	
						Sugar maple	60	3	
Po: Podunk	9A	Slight	Slight	Severe	Slight	Eastern white pine	74	9	Eastern white pine, red pine, white spruce.
						Red pine	75	10	
						Red spruce	45	7	
RbA, RbB: Ridgebury	7W	Slight	Severe	Moderate	Severe	Eastern white pine	60	7	Eastern white pine, white spruce.
						Northern red oak	60	3	
						Red spruce	47	7	
						Sugar maple	55	2	
						Balsam fir	51	7	
RdA**, RdB**:									
Ridgebury	7W	Slight	Severe	Moderate	Severe	Eastern white pine	60	7	Eastern white pine, white spruce.
						Northern red oak	60	3	
						Red spruce	47	7	
						Sugar maple	55	2	
						Balsam fir	51	7	
Whitman	3W	Slight	Severe	Severe	Severe	Red maple	60	3	
						Eastern white pine	---	--	
						European alder	---	--	
						Red spruce	---	--	
						Northern white-cedar	---	--	
						Black spruce	---	--	
						Tamarack	---	--	
Ru: Rumney	7W	Slight	Severe	Severe	Severe	Eastern white pine	56	7	Eastern white pine, white spruce, northern white-cedar.
						Red maple	65	3	
						Red spruce	45	7	
Sa: Saco	6W	Slight	Severe	Severe	Severe	Eastern white pine	55	6	Black spruce.
						Tamarack	---	--	
						Black spruce	---	--	
						Red maple	47	2	
						Gray birch	---	--	
Sc: Scarboro	6W	Slight	Severe	Severe	Severe	Eastern white pine	55	6	Northern white-cedar, European larch.
						Red maple	64	3	
						Northern white-cedar	45	5	
						Black spruce	---	--	
						Balsam fir	53	7	
						European larch	---	--	
						Tamarack	---	--	
SgB**, SgC**, ShC**:									
Shapleigh	3A	Slight	Slight	Slight	Slight	Sugar maple	65	3	Eastern white pine, red pine, European larch, Norway spruce.
						Northern red oak	70	4	
						White ash	75	3	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
SgB**, SgC**, ShC**:									
Gloucester	7A	Slight	Slight	Slight	Slight	Eastern white pine	58	7	Eastern white pine, white spruce.
						Northern red oak	52	2	
ShD**, SoD**:									
Shapleigh	3R	Slight	Moderate	Slight	Slight	Sugar maple	65	3	Eastern white pine, red pine, European larch, Norway spruce.
						Northern red oak	70	4	
						White ash	75	3	
Gloucester	7R	Slight	Moderate	Slight	Slight	Eastern white pine	58	7	Eastern white pine, white spruce.
						Northern red oak	52	2	
SoE**:									
Shapleigh	3R	Moderate	Severe	Slight	Slight	Sugar maple	65	3	Eastern white pine, red pine, European larch, Norway spruce.
						Northern red oak	70	4	
						White ash	75	3	
Gloucester	7R	Slight	Moderate	Slight	Slight	Eastern white pine	58	7	Eastern white pine, white spruce.
						Northern red oak	52	2	
SuA, SuB Sudbury	7A	Slight	Slight	Slight	Slight	Eastern white pine	60	7	Eastern white pine, red pine, European larch, white spruce, Norway spruce.
						Northern red oak	45	2	
						Red spruce	47	7	
						Red pine	60	6	
Sy Suncook	6S	Slight	Slight	Severe	Slight	Eastern white pine	55	6	Eastern white pine, red pine.
						Black oak	50	2	
						Northern red oak	50	2	
						Red maple	50	2	
WdA, WdB, WdC Windsor	7S	Slight	Slight	Severe	Slight	Eastern white pine	57	7	Eastern white pine, red pine, Norway spruce.
						Northern red oak	52	2	
						Red pine	61	7	
						Sugar maple	55	2	
WdE Windsor	7R	Severe	Severe	Severe	Slight	Eastern white pine	57	7	Eastern white pine, red pine, Norway spruce.
						Northern red oak	52	2	
						Red pine	61	7	
						Sugar maple	55	2	
WoB, WoC Woodbridge	8A	Slight	Slight	Slight	Moderate	Eastern white pine	67	8	Eastern white pine, European larch.
						Northern red oak	72	4	
						Red pine	65	8	
						Red spruce	50	8	
						Sugar maple	65	3	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
WvB, WvC--------- Woodbridge	8A	Slight	Slight	Slight	Moderate	Eastern white pine--	67	8	Eastern white pine, red pine, white spruce, European larch.
						Sugar maple----------	56	2	
						Northern red oak----	70	4	
						Red spruce----------	39	6	
						Balsam fir----------	55	8	
						White spruce--------	53	8	
						White ash----------	64	3	
						Red pine----------	61	7	

* Productivity class is the yield in cubic meters per hectare per year calculated at the age of culmination of mean annual increment for fully stocked natural stands.

** See description of the map unit for composition and behavior characteristics of the map unit.

TABLE F.--WILDLIFE HABITAT

(See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated)

Soil name and map symbol	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for: Openland wildlife	Woodland wildlife	Wetland wildlife
AcB Acton	Poor	Fair	Fair	Good	Good	Poor	Very poor.	Good	Good	Very poor.
AdB Acton	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
AdC Acton	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
AfA Agawam	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
AfB Agawam	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
AgA Au Gres	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
AgB Au Gres	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
AuB Au Gres	Poor	Poor	Fair	Good	Good	Fair	Very poor.	Poor	Good	Poor.
BcB Belgrade	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
CaC*:										
Canaan	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Herman	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
CaD*, ChD*:										
Canaan	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Hermon	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
ChE*:										
Canaan	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Herman	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
CoA, CoB, CoC Colton	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.
CtE Colton	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
DuB Duane	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
GcB: Gloucester	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
GcC: Gloucester	Fair	Good	Good	Fair	Fair	Very poor.	Very poor.	Good	Fair	Very poor.
GcD: Gloucester	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
GrB, GrC, GrD, GrE: Gloucester	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
GsD, GsE: Gloucester	Very poor.	Very poor.	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Gv*. Gravel pits										
HmB: Hermon	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
HmC: Hermon	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
HmD: Hermon	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
HnB: Hermon	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
HnC, HnD: Hermon	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
HoD, HoE: Hermon	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
HrE: Hinckley	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
HsA, HsB, HsC: Hinckley	Poor	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Lm: Limerick	Poor	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
Ma*. Made land										
Mh*. Marsh										
MmA, MmB, MmC: Merrimac	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Mn*. Mixed alluvial land										
Mp*: Muck and peat	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.

See footnote at end of table.

1. General Guidelines:

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
NnA---------- Ninigret	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Of---------- Ondawa	Poor	Fair	Fair	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
Oh---------- Ondawa	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
PaB---------- Paxton	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
PaC---------- Paxton	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
PaD---------- Paxton	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
PnB---------- Paxton	Poor	Fair	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
PnC, PnD---------- Paxton	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
PnE---------- Paxton	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Po---------- Podunk	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor.
RbA---------- Ridgebury	Poor	Poor	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
RbB---------- Ridgebury	Poor	Poor	Fair	Fair	Fair	Poor	Very poor.	Fair	Fair	Very poor.
RdA*:										
Ridgebury---------	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Whitman----------	Very poor.	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Fair.
RdB*:										
Ridgebury---------	Very poor.	Poor	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
Whitman----------	Very poor.	Poor	Poor	Poor	Poor	Poor	Very poor.	Poor	Poor	Very poor.
Rh*. Riverwash										
Ro*. Rock outcrop										
Ru---------- Rumney	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.

See footnote at end of table.

requirements

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
Sa: Saco	Very poor.	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair.
Sc: Scarboro	Very poor.	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair.
SgB*:										
Shapleigh	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
Gloucester	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
SgC*:										
Shapleigh	Fair	Good	Good	Fair	Fair	Very poor.	Very poor.	Good	Fair	Very poor.
Gloucester	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
ShC*, ShD*, SoD*, SoE*:										
Shapleigh	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Gloucester	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
SuA: Sudbury	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
SuB: Sudbury	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Sy: Suncook	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
WdA, WdB, WdC: Windsor	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
WdE: Windsor	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
WoB: Woodbridge	Fair	Good	Good	Good	Fair	Poor	Very poor.	Good	Good	Very poor.
WoC: Woodbridge	Fair	Good	Good	Good	Fair	Very poor.	Very poor.	Good	Good	Very poor.
WvB: Woodbridge	Poor	Fair	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
WvC: Woodbridge	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
W*. Water (less than 40 acres)										

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
WATER*. Water (greater than 40 acres)										

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 4.--ENGINEERING INDEX PROPERTIES

(The symbol < means less than; > means more than. Absence of an entry indicates that data were not estimated)

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
AcB---------- Acton	0-7	Fine sandy loam	SM, ML	A-2, A-4	0-5	90-100	85-100	55-85	30-60	<18	NP
	7-34	Fine sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-100	70-100	50-85	30-60	<12	NP
	34-60	Loamy sand, fine sand, gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-100	50-100	20-60	10-30	---	NP
AdB, AdC---------- Acton	0-5	Very stony fine sandy loam.	SM, ML	A-2, A-4	5-15	80-100	70-95	50-85	30-60	<18	NP
	5-34	Fine sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	34-60	Loamy sand, fine sand, gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
AfA, AfB---------- Agawam	0-14	Very fine sandy loam.	SM, ML	A-4	0	95-100	85-100	65-85	35-55	<25	NP-3
	14-17	Fine sandy loam, very fine sandy loam, loam.	SM, ML	A-2, A-4	0	80-100	60-100	50-85	30-55	<25	NP-3
	17-29	Fine sandy loam	SM, ML	A-2, A-4	0	80-100	60-100	50-85	30-55	<20	NP-3
	29-45	Stratified loamy fine sand to gravelly sand.	SM, SP-SM, GM, GP-GM	A-1, A-2, A-3	0-5	60-100	50-100	35-80	5-35	---	NP
AgA, AgB---------- Au Gres	0-8	Fine sandy loam	SM, ML	A-4, A-2	0	100	85-100	65-95	30-75	---	NP
	8-26	Fine sandy loam, sandy loam.	SM, ML	A-4, A-2	0	100	85-100	65-95	30-75	---	NP
	26-60	Fine sand, sand, very fine sand.	SM, SP-SM	A-2, A-4, A-3	0	100	85-100	50-80	5-45	---	NP
AuB---------- Au Gres	0-8	Loamy sand-------	SP, SM, SP-SM	A-2-4, A-3	0	95-100	90-100	60-80	0-20	---	NP
	8-26	Sand, loamy sand, fine sand.	SP-SM, SP, SM	A-2-4, A-3	0	95-100	90-100	60-80	0-15	---	NP
	26-60	Sand, fine sand, loamy coarse sand.	SP-SM, SP	A-3, A-2-4	0	95-100	90-100	50-80	0-10	---	NP
BcB---------- Belgrade	0-3	Silt loam--------	ML	A-4	0	100	95-100	90-100	60-95	<35	NP-8
	3-17	Silt loam, very fine sandy loam, loamy very fine sand.	ML	A-4	0	100	95-100	85-100	50-90	<35	NP-8
	17-60	Silt loam, loamy very fine sand, sand and gravel.	ML, SM	A-1, A-2, A-4	0	75-100	55-100	35-100	15-90	<35	NP-8
CaC*:											
Canaan----------	0-2	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	2-15	Loam, channery fine sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	15-19	Unweathered bedrock.	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Frag- ments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticit index
	In				Pct					Pct	
CaC*:											
Herman----------	0-3	Very stony sandy loam.	SM, ML	A-2, A-4	5-15	80-100	70-90	50-85	30-60	<18	NP
	3-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
CaD*, ChD*:											
Canaan----------	0-2	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	2-15	Loam, channery fine sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	15-19	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Hermon----------	0-3	Very stony sandy loam.	SM, ML	A-2, A-4	5-15	80-100	70-90	50-85	30-60	<18	NP
	3-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
ChE*:											
Canaan----------	0-2	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	2-15	Loam, channery fine sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	15-19	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Herman----------	0-3	Very stony sandy loam.	SM, ML	A-2, A-4	5-15	80-100	70-90	50-85	30-60	<18	NP
	3-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
CoA, CoB, CoC---- Colton	0-8	Loamy sand-------	SM, SW-SM, SP-SM	A-1, A-2, A-3, A-4	0-5	80-90	75-85	40-70	5-45	<10	NP-2
	8-24	Gravelly loamy fine sand, very gravelly sand, coobly sand.	SM, GM, SP, GP	A-1	5-20	30-80	25-75	20-50	2-20	---	NP
	24-60	Very gravelly sand, very coobly sand.	GP, SP, GW, SW	A-1	10-45	20-55	15-50	10-30	0-5	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
CtE---------- Colton	0-5	Gravelly loamy sand.	SM, SP, GW, GM	A-1, A-2, A-3	5-20	30-80	25-75	25-60	2-25	<10	NP-2
	5-24	Gravelly loamy fine sand, very gravelly sand, cobbly sand.	SM, GM, SP, GP	A-1	5-20	30-80	25-75	20-50	2-20	---	NP
	24-60	Very gravelly sand, very cobbly sand.	GP, SP, GW, SW	A-1	10-45	20-55	15-50	10-30	0-5	---	NP
DuB---------- Duane	0-1	Loamy fine sand	SM, SP-SM	A-2, A-4, A-1	0-5	90-100	75-100	40-85	10-40	<15	NP-2
	1-24	Very gravelly sand, very cobbly sand, gravelly loamy fine sand.	GM, SM, SP, GP	A-1, A-2, A-3	10-50	40-80	35-75	20-60	2-30	---	NP
	24-60	Very gravelly sand, very cobbly sand.	GP, SP, GW, SW	A-1	10-50	45-60	40-55	20-40	2-5	---	NP
GcB, GcC, GcD---- Gloucester	0-8	Sandy loam--------	SM	A-2, A-4	0-10	85-95	75-90	60-85	20-50	<18	NP
	8-26	Fine sandy loam, sandy loam, gravelly sandy loam.	SM	A-2, A-4	5-15	75-95	60-95	50-75	20-45	<12	NP
	26-60	Sandy loam, loamy sand, gravelly sandy loam.	SM, SP-SM, GM, GP-GM	A-1, A-2	5-25	60-85	45-75	30-70	10-35	---	NP
GrB---------- Gloucester	0-5	Very stony sandy loam.	SM, SC, SM-SC	A-2, A-4, A-1-B	5-25	70-95	60-90	30-85	20-50	<30	NP-1
	5-26	Fine sandy loam, sandy loam, gravelly sandy loam.	SM, SC, SM-SC	A-2, A-4	5-15	75-95	60-95	50-75	25-45	<25	NP-1
	26-60	Sandy loam, loamy, gravelly sandy loam.	SM, SP-SM, GM, GP-GM	A-1, A-2	5-25	60-85	45-75	30-70	10-35	---	NP
GrC, GrD, GrE---- Gloucester	0-4	Very stony sandy loam.	SM, SC, SM-SC	A-2, A-4, A-1-B	5-25	70-95	60-90	30-85	20-50	<30	NP-1
	4-26	Fine sandy loam, sandy loam, gravelly sandy loam.	SM, SC, SM-SC	A-2, A-4	5-15	75-95	60-95	50-75	25-45	<25	NP-1
	26-60	Sandy loam, loamy, gravelly sandy loam.	SM, SP-SM, GM, GP-GM	A-1, A-2	5-25	60-85	45-75	30-70	10-35	---	NP
GsD, GsE---------- Gloucester	0-4	Extremely stony sandy loam.	SM, SC, SM-SC	A-2, A-4, A-1-B	15-30	70-95	60-90	30-85	20-50	<30	NP-1
	4-26	Fine sandy loam, sandy loam, gravelly sandy loam.	SM, SC, SM-SC	A-2, A-4	5-15	75-95	60-95	50-75	25-45	<25	NP-1
	26-60	Sandy loam, loamy, gravelly sandy loam.	SM, SP-SM, GM, GP-GM	A-1, A-2	5-25	60-85	45-75	30-70	10-35	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
Gv. Gravel pits											
HmB, HmC, HmD---- Hermon	0-8	Sandy loam-------	SM, ML	A-2, A-4	0-5	90-100	85-100	55-85	30-60	<18	NP
	8-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-100	70-100	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-100	50-100	20-60	10-30	---	NP
HnB, HnC, HnD---- Hermon	0-3	Very stony sandy loam.	SM, ML	A-2, A-4	5-15	80-100	70-90	50-85	30-60	<18	NP
	3-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
HoD, HoE--------- Hermon	0-3	Extremely stony sandy loam.	SM, ML	A-2, A-4	10-35	80-95	70-90	40-85	25-60	<15	NP
	3-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP
	26-60	Loamy sand, gravelly loamy sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-35	65-85	50-80	20-60	10-30	---	NP
HrE---------- Hinckley	0-5	Gravelly loamy sand.	SM, SP-SM, GM, GP-GM	A-1, A-2	0-10	60-85	50-75	25-60	10-35	<20	NP
	5-19	Gravelly loamy sand, loamy fine sand, very gravelly loamy coarse sand.	SM, GM, GP-GM, SP-SM	A-1, A-2, A-3	0-20	50-95	30-85	15-70	2-30	<20	NP
	19-60	Stratified very gravelly loamy fine sand to cobbly coarse sand.	SP, SP-SM, GP, GP-GM	A-1	5-25	50-65	30-50	10-40	0-20	<10	NP
HsA, HsB, HsC---- Hinckley	0-7	Loamy sand-------	SM, SP-SM	A-1, A-2	0-5	85-95	75-90	35-75	10-35	<20	NP
	7-19	Gravelly loamy sand, loamy fine sand, very gravelly loamy coarse sand.	SM, GM, GP-GM, SP-SM	A-1, A-2, A-3	0-20	50-95	30-85	15-70	2-30	<20	NP
	19-60	Stratified very gravelly loamy fine sand to cobbly coarse sand.	SP, SP-SM, GP, GP-GM	A-1	5-25	50-65	30-50	10-40	0-20	<10	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
Lm---------- Limerick	0-10	Silt loam--------	ML, CL-ML	A-4	0	100	95-100	80-100	55-95	<25	NP-5
	10-60	Silt loam, silt, very fine sandy loam.	ML, CL-ML	A-4	0	100	95-100	80-100	70-95	<25	NP-5
Ma*. Made land											
Mh*. Marsh											
MmA, MmB, MmC---- Merrimac	0-11	Sandy loam--------	SM, ML	A-2, A-4	0	85-95	70-90	40-85	20-55	<20	NP
	11-16	Sandy loam--------	SM	A-2	0	75-95	70-90	40-60	20-35	<25	NP
	16-25	Gravelly loamy sand, sandy loam, gravelly sandy loam.	SP, SM, SP-SM	A-1, A-2, A-3	0	65-95	55-90	30-60	0-35	<25	NP
	25-60	Stratified sand to very gravelly coarse sand.	GP, SP, SP-SM, GP-GM	A-1	5-25	40-65	30-60	15-40	0-10	---	NP
Mn*. Mixed alluvial land											
Mp*---------- Muck and peat	0-6	Fibric material	PT	A-8	0	---	---	---	---	---	---
	6-60	Hemic material---	PT	A-8	0	---	---	---	---	---	---
NnA---------- Ninigret	0-10	Very fine sandy loam.	SM, ML	A-4	0-2	90-100	75-100	60-95	40-85	<35	NP-7
	10-37	Fine sandy loam, very fine sandy loam, silt loam.	SM, ML	A-2, A-4	0-2	90-100	75-100	60-95	30-80	<25	NP-4
	37-60	Stratified loamy fine sand to very gravelly coarse sand.	SP, SM, GP, GM	A-1, A-2, A-3	0-25	45-100	30-100	15-80	2-30	---	NP
Of, Oh---------- Ondawa	0-12	Fine sandy loam	SM, ML	A-2, A-4	0	100	100	60-100	30-60	---	NP
	12-15	Fine sandy loam, sandy loam, loam.	SM, ML	A-2, A-4	0	100	100	80-95	20-70	---	NP
	15-60	Stratified loamy fine sand to sand.	SP, SM	A-2, A-3	0	90-100	75-100	70-90	0-35	---	NP
PaB, PaC, PaD---- Paxton	0-8	Loam----------	SM, ML, SM-SC	A-2, A-4	0-10	80-95	75-90	50-85	30-65	<40	NP-1
	8-22	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC	A-2, A-4	0-15	70-90	65-90	50-85	25-65	<30	NP-7
	22-60	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC	A-2, A-4	0-15	70-90	60-85	50-75	20-60	<30	NP-7

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Frag-ments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticit index
	In				Pct					Pct	
PnB, PnC, PnD, PnE---------- Paxton	0-3	Very stony loam	SM, ML, CL-ML	A-2, A-4	5-15	90-100	75-90	50-90	30-80	<30	NP-10
	3-22	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC, CL-ML	A-2, A-4, A-1-B	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	22-60	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC, CL-ML	A-2, A-4, A-1-B	0-15	70-90	60-85	35-80	20-60	<30	NP-10
Po---------- Podunk	0-12	Fine sandy loam	SM, ML	A-2, A-4	0	100	100	60-100	30-90	---	NP
	12-28	Fine sandy loam, sandy loam, loam.	SM, ML	A-2, A-4	0	100	100	60-95	30-75	---	NP
	28-60	Stratified loamy fine sand to gravelly coarse sand.	SP-SM, SM	A-2, A-1, A-3	0	75-100	65-100	35-85	5-25	---	NP
RbA---------- Ridgebury	0-5	Loam----------	ML, CL-ML	A-4, A-6	0-5	90-100	85-95	85-95	70-85	20-40	2-12
	5-22	Loam, fine sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
	22-60	Fine sandy loam, sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
RoB---------- Ridgebury	0-8	Loam----------	ML, CL-ML	A-4, A-6	0-5	90-100	85-95	85-95	70-85	20-40	2-12
	8-18	Loam, fine sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
	18-60	Fine sandy loam, sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
RdA*, RdB*: Ridgebury--------	0-5	Very stony loam	SM, ML	A-2, A-4	5-15	80-100	55-95	35-95	25-85	<25	NP-3
	5-18	Loam, fine sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
	18-60	Fine sandy loam, sandy loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	80-95	55-95	35-80	25-60	<25	NP-3
Whitman---------	0-10	Very stony muck	PT	A-8	5-15	---	---	---	---	---	---
	10-20	Silt loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4, A-6	0-15	75-100	65-100	50-100	30-90	<30	NP-15
	20-60	Silt loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4, A-5	0-15	75-100	65-100	50-100	30-90	<30	NP-15
Rh*. Riverwash											
Ro*. Rock outcrop											

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Frag- ments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas tici inde
	In				Pct					Pct	
Ru---------- Rumney	0-10	Fine sandy loam	SM, ML	A-2, A-4	0	100	85-100	50-85	25-55	---	NP
	10-15	Fine sandy loam, sandy loam, loam.	SM, ML	A-2, A-4	0	100	85-100	50-95	25-75	---	NP
	15-60	Stratified silt to gravelly sand.	SM, SP-SM	A-1, A-2, A-3	0	80-100	45-95	25-70	5-30	---	NP
Sa---------- Saco	0-7	Silt loam--------	ML, CL-ML, CL	A-4, A-5	0	100	90-100	85-100	80-95	<40	NP-1
	7-15	Silt loam, very fine sandy loam.	ML	A-4	0	100	90-100	85-100	80-95	<40	NP-1
	15-60	Silt loam, very fine sandy loam.	ML, CL-ML	A-4	0	100	90-100	85-100	80-95	<25	NP-5
Sc---------- Scarboro	0-3	Muck----------	PT	A-8	0	---	---	---	---	---	---
	3-19	Loamy fine sand, fine sandy loam, mucky sand.	SM, SP-SM	A-1, A-2, A-3	0	95-100	75-100	40-100	5-35	---	NP
	19-60	Loamy sand, coarse sand, fine sand.	SM, SP	A-1, A-2, A-3	0	95-100	75-100	40-100	0-35	---	NP
SgB*, SgC*:											
Shapleigh-------	0-8	Sandy loam--------	SM, ML, SM-SC, CL-ML	A-4, A-2	0-5	80-95	75-90	50-80	25-65	10-20	1-6
	8-22	Silt loam, gravelly loam, gravelly sandy loam.	SM, ML, GM, CL-ML	A-4, A-2, A-1	0-10	60-95	55-90	35-75	15-75	10-20	1-6
	22-26	Unweathered bedrock.	---	---	---	---	---	---	---	---	---
Gloucester-------	0-8	Fine sandy loam	SM, ML	A-2, A-4	0-5	85-95	75-90	55-85	30-60	<18	NP-8
	8-26	Fine sandy loam, very fine sandy loam, gravelly loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP-8
	26-60	Gravelly loamy sand, loamy fine sand, gravelly loamy coarse sand.	SM, SP-SM	A-1, A-2	10-25	65-85	50-80	20-60	10-30	---	NP
ShC*, ShD*, SoD*, SoE*:											
Shapleigh------	0-1	Very stony sandy loam.	SM, GM, GM-GC, SM-SC	A-4, A-2, A-1	5-10	55-80	50-75	30-65	15-50	10-20	1-6
	1-22	Silt loam, gravelly loam, gravelly sandy loam.	SM, ML, GM, CL-ML	A-4, A-2, A-1	0-10	60-95	55-90	33-85	15-75	10-20	1-6
	22-26	Unweathered bedrock.	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 4.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
ShC*, ShD*, SoD*, SoE*:											
Gloucester	0-4	Very stony fine sandy loam.	SM, ML	A-2, A-4	5-15	80-95	70-90	50-85	30-60	<18	NP-8
	4-26	Fine sandy loam, very fine sandy loam, gravelly loam.	SM, ML	A-2, A-4	0-10	80-95	70-90	50-85	30-60	<12	NP-8
	26-60	Gravelly loamy sand, loamy fine sand, gravelly loamy coarse sand.	SM, SP-SM	A-1, A-2	10-25	65-85	50-80	20-60	10-30	---	NP
SuA, SuB Sudbury	0-3	Fine sandy loam	SM, ML	A-2, A-4, A-1	0-5	85-100	70-100	40-90	20-55	---	NP
	3-27	Sandy loam, fine sandy loam, gravelly sandy loam.	SM	A-2, A-4, A-1	0-5	85-100	60-100	40-80	20-50	---	NP
	27-60	Gravelly coarse sand, loamy sand, sandy loam.	SM, SP-SM	A-1, A-2, A-3	0-5	70-100	60-100	30-70	5-35	---	NP
Sy Suncook	0-6	Loamy sand	SM	A-2	0	95-100	85-100	45-85	15-35	---	NP
	6-37	Stratified loamy fine sand to coarse sand.	SP, SM	A-1, A-2, A-3	0	90-100	70-100	20-85	0-35	---	NP
	37-60	Stratified loamy fine sand to gravelly coarse sand.	SP, SM	A-1, A-2, A-3	0	60-100	45-100	20-85	0-35	---	NP
WdA, WdB, WdC, WdE Windsor	0-3	Loamy sand	SM	A-1, A-2	0	95-100	80-100	45-90	20-35	---	NP
	3-15	Loamy sand, loamy fine sand.	SM	A-1, A-2	0	95-100	80-100	45-90	15-30	---	NP
	15-60	Sand, fine sand, loamy sand.	SM, SP, SP-SM	A-1, A-2, A-3	0	90-100	75-100	40-90	2-30	---	NP
WoB, WoC Woodbridge	0-7	Loam	SM, ML, SM-SC	A-2, A-4	0-10	85-95	70-90	50-85	30-65	<40	NP-10
	7-26	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML, SM-SC	A-2, A-4	0-15	75-90	65-90	50-85	25-65	<30	NP-7
	26-60	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML, SM-SC	A-2, A-4	0-15	70-90	60-85	50-75	20-60	<30	NP-7
WvB, WvC Woodbridge	0-5	Very stony loam	SM, ML, CL-ML, SC	A-2, A-4	5-15	90-100	75-90	50-90	30-80	<30	NP-10
	5-26	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC, CL-ML	A-2, A-4, A-1-B	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	26-60	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SM-SC, CL-ML	A-2, A-4, A-1-B	0-15	70-95	55-95	35-80	20-60	<30	NP-10
W*. Water (less than 40 acres)											

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag- ments > 3 inches	Percentage passing sieve number--				Liquid limit	Plas- ticit index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
WATER*. Water (greater than 40 acres)											

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 3.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

(The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Organic matter" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors K	Erosion factors T	Organic matter
	In	In/hr	In/in	pH				Pct
AcB---------- Acton	0-7	0.6-2.0	0.15-0.21	3.6-5.5	Low----------	0.28	3	1-5
	7-34	0.6-2.0	0.09-0.17	3.6-6.5	Low----------	0.28		
	34-60	0.6-2.0	0.04-0.08	3.6-5.5	Low----------	0.17		
AdB, AdC--------- Acton	0-5	0.6-2.0	0.14-0.20	3.6-6.5	Low----------	0.24	3	---
	5-34	0.6-2.0	0.09-0.17	3.6-6.5	Low----------	0.28		
	34-60	0.6-2.0	0.04-0.08	3.6-6.5	Low----------	0.17		
AfA, AfB--------- Agawam	0-14	2.0-6.0	0.15-0.21	4.5-6.5	Low----------	0.28	3	1-5
	14-17	2.0-6.0	0.11-0.21	4.5-6.5	Low----------	0.37		
	17-29	2.0-6.0	0.11-0.13	4.5-6.5	Low----------	0.28		
	29-45	6.0-20	0.02-0.12	4.5-6.5	Low----------	0.17		
AgA, AgB--------- Au Gres	0-8	2.0-6.0	0.16-0.25	4.5-6.0	Low----------	0.28	5	3-9
	8-26	2.0-6.0	0.10-0.18	4.5-6.0	Low----------	0.28		
	26-60	6.0-20	0.06-0.13	4.5-6.0	Low----------	0.28		
AuB---------- Au Gres	0-8	6.0-20	0.07-0.10	4.5-7.3	Low----------	0.17	5	3-4
	8-26	6.0-20	0.06-0.09	4.5-7.3	Low----------	0.17		
	26-60	6.0-20	0.05-0.07	5.1-7.3	Low----------	0.17		
BcB---------- Belgrade	0-3	0.6-2.0	0.18-0.25	4.5-7.3	Low----------	0.49	3	1-5
	3-17	0.6-2.0	0.16-0.20	4.5-7.3	Low----------	0.64		
	17-60	0.06-6.0	0.06-0.20	5.1-7.8	Low----------	0.64		
CaC*:								
Canaan----------	0-2	2.0-6.0	0.13-0.24	3.6-6.0	Low----------	0.20	2	---
	2-15	2.0-6.0	0.08-0.28	3.6-6.0	Low----------	0.32		
	15-19	---	---	---	----------	----		
Hermon----------	0-3	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	3-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
CaD*, ChD*:								
Canaan----------	0-2	2.0-6.0	0.13-0.24	3.6-6.0	Low----------	0.20	2	---
	2-15	2.0-6.0	0.08-0.28	3.6-6.0	Low----------	0.32		
	15-19	---	---	---	----------	----		
Hermon----------	0-3	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	3-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
ChE*:								
Canaan----------	0-2	2.0-6.0	0.13-0.24	3.6-6.0	Low----------	0.20	2	---
	2-15	2.0-6.0	0.08-0.28	3.6-6.0	Low----------	0.32		
	15-19	---	---	---	----------	----		
Hermon----------	0-3	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	3-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
CoA, CoB, CoC---- Colton	0-8	>6.0	0.03-0.12	3.6-6.5	Low----------	0.17	3	3-8
	8-24	>6.0	0.02-0.05	3.6-5.5	Low----------	0.17		
	24-60	>20	0.01-0.02	4.5-6.0	Low----------	0.17		

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors K	Erosion factors T	Organ matte
	In	In/hr	In/in	pH				Pct
CtE---------- Colton	0-5	>6.0	0.03-0.07	3.6-6.5	Low----------	0.17	3	3-8
	5-24	>6.0	0.02-0.05	3.5-5.5	Low----------	0.17		
	24-60	>20	0.01-0.02	4.5-6.0	Low----------	0.17		
DuB---------- Duane	0-1	2.0-6.0	0.06-0.10	3.6-6.0	Low----------	0.17	3	3-8
	1-24	6.0-20	0.01-0.06	4.5-6.0	Low----------	0.17		
	24-60	6.0-20	0.01-0.02	4.5-6.0	Low----------	0.17		
GcB, GcC, GcD---- Gloucester	0-8	0.6-2.0	0.10-0.23	3.6-6.0	Low----------	0.20	3	2-5
	8-26	0.6-2.0	0.06-0.16	3.5-6.0	Low----------	0.28		
	26-60	0.06-0.6	0.03-0.09	5.1-6.5	Low----------	0.17		
GrB---------- Gloucester	0-5	0.6-2.0	0.06-0.23	3.6-6.0	Low----------	0.17	3	---
	5-26	0.6-2.0	0.06-0.16	3.6-6.0	Low----------	0.28		
	26-60	0.06-0.6	0.03-0.09	5.1-6.5	Low----------	0.17		
GrC, GrD, GrE---- Gloucester	0-4	0.6-2.0	0.06-0.23	3.6-6.0	Low----------	0.17	3	---
	4-26	0.6-2.0	0.06-0.16	3.6-5.0	Low----------	0.28		
	26-60	0.06-0.6	0.03-0.09	5.1-6.5	Low----------	0.17		
GsD, GsE--------- Gloucester	0-4	0.6-2.0	0.06-0.18	3.6-6.0	Low----------	0.17	3	---
	4-26	0.6-2.0	0.06-0.16	3.6-6.0	Low----------	0.28		
	26-60	0.06-0.6	0.03-0.09	5.1-6.5	Low----------	0.17		
Gv*. Gravel pits								
HmB, HmC, HmD---- Hermon	0-8	0.6-2.0	0.15-0.21	3.5-5.0	Low----------	0.28	3	3-5
	8-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-5.0	0.04-0.08	3.6-6.0	Low----------	0.17		
HnB, HnC, HnD---- Hermon	0-3	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	3-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-5.0	0.04-0.08	3.6-6.0	Low----------	0.17		
HoD, HoE--------- Hermon	0-3	0.6-2.0	0.07-0.17	3.6-6.0	Low----------	0.20	3	---
	3-26	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	2.0-5.0	0.04-0.08	3.6-6.0	Low----------	0.17		
HrE---------- Hinckley	0-5	6.0-20	0.06-0.12	3.6-6.0	Low----------	0.17	3	2-7
	5-19	6.0-20	0.01-0.10	3.6-6.0	Low----------	0.17		
	19-60	>20	0.01-0.06	3.6-6.0	Low----------	0.10		
HsA, HsB, HsC---- Hinckley	0-7	6.0-20	0.09-0.13	3.6-6.0	Low----------	0.17	3	2-7
	7-19	6.0-20	0.01-0.10	3.6-6.0	Low----------	0.17		
	19-60	>20	0.01-0.06	3.6-6.0	Low----------	0.10		
Lm---------- Limerick	0-10	0.2-2.0	0.18-0.24	5.1-7.3	Low----------	0.49	5	3-1
	10-60	0.06-0.2	0.17-0.21	5.6-7.8	Low----------	0.64		
Ma*. Made land								
Mh*. Marsh								
MmA, MmB, MmC---- Merrimac	0-11	2.0-6.0	0.14-0.19	3.6-6.0	Low----------	0.24	3	1-5
	11-16	2.0-6.0	0.14-0.17	3.6-6.0	Low----------	0.24		
	16-25	2.0-20.0	0.03-0.12	3.6-6.0	Low----------	0.17		
	25-60	6.0-20	0.01-0.06	3.6-6.0	Low----------	0.10		

See footnote at end of table.

TABLE 3.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors K	Erosion factors I	Organ matte
	In	In/hr	In/in	pH				Pct
Mn*. Mixed alluvial land								
Mp*. Muck and peat	0-6	>6.0	0.55-0.65	3.6-4.4	----------	----	2	55-7
	6-60	0.6-5.0	0.45-0.55	3.6-4.4	----------	----		
NnA. Ninigret	0-10	0.6-5.0	0.15-0.24	4.5-6.0	Low----------	0.32	3	2-5
	10-37	0.6-5.0	0.14-0.22	4.5-6.0	Low----------	0.37		
	37-60	>6.0	0.01-0.10	4.5-6.5	Low----------	0.15		
Of, Oh. Ondawa	0-12	2.0-5.0	0.12-0.26	4.5-6.5	Low----------	0.24	5	3-7
	12-15	2.0-5.0	0.12-0.22	4.5-6.5	Low----------	0.37		
	15-60	2.0-20	0.04-0.13	4.5-6.5	Low----------	0.20		
PaB, PaC, PaD. Paxton	0-8	0.6-2.0	0.10-0.20	4.5-6.0	Low----------	0.24	3	2-5
	8-22	0.6-2.0	0.08-0.18	4.5-6.0	Low----------	0.32		
	22-60	<0.2	0.05-0.12	4.5-5.0	Low----------	0.24		
PnB, PnC, PnD, PnE. Paxton	0-3	0.6-2.0	0.10-0.23	3.6-6.0	Low----------	0.20	3	---
	3-22	0.6-2.0	0.06-0.20	3.6-6.0	Low----------	0.32		
	22-60	0.06-0.6	0.05-0.12	3.6-6.0	Low----------	0.20		
Po. Podunk	0-12	2.0-6.0	0.12-0.24	4.5-6.5	Low----------	0.24	5	3-8
	12-28	2.0-5.0	0.12-0.18	4.5-6.5	Low----------	0.37		
	28-60	2.0-20	0.04-0.13	4.5-6.5	Low----------	0.20		
RbA. Ridgebury	0-5	0.6-2.0	0.06-0.24	4.5-5.5	Low----------	0.28	3	4-7
	5-22	0.6-2.0	0.04-0.20	4.5-5.5	Low----------	0.32		
	22-60	0.06-0.2	0.01-0.05	4.5-6.0	Low----------	0.24		
RbB. Ridgebury	0-8	0.6-2.0	0.06-0.24	4.5-5.5	Low----------	0.28	3	4-7
	8-18	0.6-2.0	0.04-0.20	4.5-5.5	Low----------	0.32		
	18-60	0.06-0.2	0.01-0.05	4.5-6.0	Low----------	0.24		
RdA*, RdB*:								
Ridgebury	0-5	0.6-2.0	0.06-0.24	4.5-5.5	Low----------	0.24	3	---
	5-18	0.6-2.0	0.04-0.20	4.5-5.5	Low----------	0.32		
	18-60	0.06-0.2	0.01-0.05	4.5-5.0	Low----------	0.24		
Whitman	0-10	0.2-0.6	0.32-0.42	4.5-7.3	Low----------	----	---	20-6
	10-20	0.6-2.0	0.11-0.22	4.5-7.3	Low----------	0.28		
	20-60	<0.2	0.02-0.06	4.5-7.3	Low----------	0.28		
Rh*. Riverwash								
Ro*. Rock outcrop								
Ru. Rumney	0-10	2.0-6.0	0.12-0.20	4.5-6.5	Low----------	0.24	5	4-8
	10-15	2.0-6.0	0.12-0.19	4.5-6.5	Low----------	0.37		
	15-60	>6.0	0.04-0.13	4.5-6.5	Low----------	0.20		
Sa. Saco	0-7	0.6-2.0	0.20-0.30	4.5-6.5	Low----------	0.32	5	---
	7-15	0.6-2.0	0.20-0.30	4.5-6.5	Low----------	0.49		
	15-60	0.6-2.0	0.20-0.30	5.6-7.3	Low----------	0.49		

See footnote at end of table.

TABLE 9.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors K	Erosion factors T	Organic matter
	In	In/hr	In/in	pH				Pct
Sc: Scarboro	0-3	6.0-20	0.20-0.45	4.5-6.0	----------	----	5	---
	3-19	>6.0	0.01-0.13	4.5-6.0	Low----------	0.17		
	19-60	>6.0	0.01-0.09	4.5-6.0	Low----------	0.17		
SgB*, SgC*:								
Shapleigh	0-8	0.6-6.0	0.12-0.16	4.5-6.0	Low----------	0.24	3	2-6
	8-22	0.6-6.0	0.08-0.18	4.5-6.0	Low----------	0.20		
	22-26	---	---	---	----------	----		
Gloucester	0-8	2.0-6.0	0.11-0.19	3.6-6.0	Low----------	0.24	3	1-6
	8-26	2.0-6.0	0.09-0.17	3.6-5.0	Low----------	0.28		
	26-60	6.0-20	0.04-0.08	3.6-6.0	Low----------	0.17		
ShC*, ShD*, SoD*, SoE*:								
Shapleigh	0-1	0.6-6.0	0.08-0.14	4.5-6.0	Low----------	0.20	3	---
	1-22	0.6-6.0	0.08-0.18	4.5-6.0	Low----------	0.20		
	22-26	---	---	---	----------	----		
Gloucester	0-4	2.0-6.0	0.13-0.20	3.6-6.0	Low----------	0.20	3	---
	4-26	2.0-6.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	26-60	6.0-20	0.04-0.08	3.6-6.0	Low----------	0.17		
SuA, SuB: Sudbury	0-3	2.0-6.0	0.10-0.25	3.6-6.0	Low----------	0.24	3	2-6
	3-27	2.0-6.0	0.07-0.18	3.6-6.0	Low----------	0.24		
	27-60	2.0-20	0.01-0.15	3.6-6.0	Low----------	0.17		
Sy: Suncook	0-6	>6.0	0.07-0.12	4.5-6.5	Low----------	0.17	5	2-5
	6-37	>6.0	0.03-0.10	4.5-6.5	Low----------	0.17		
	37-60	>6.0	0.01-0.10	4.5-6.5	Low----------	0.10		
WdA, WdB, WdC, WdE: Windsor	0-3	>6.0	0.09-0.12	4.5-6.0	Low----------	0.17	5	2-4
	3-15	>6.0	0.07-0.10	4.5-6.0	Low----------	0.17		
	15-60	>6.0	0.04-0.10	4.5-6.5	Low----------	0.10		
WoB, WoC: Woodbridge	0-7	0.6-2.0	0.10-0.20	4.5-6.0	Low----------	0.24	3	2-6
	7-26	0.6-2.0	0.08-0.18	4.5-6.0	Low----------	0.32		
	26-60	<0.2	0.05-0.12	4.5-6.0	Low----------	0.24		
WvB, WvC: Woodbridge	0-5	0.6-2.0	0.16-0.24	3.6-6.0	Low----------	0.20	3	---
	5-26	0.6-2.0	0.06-0.20	3.6-6.0	Low----------	0.32		
	26-60	0.06-0.6	0.05-0.12	3.6-6.0	Low----------	0.24		
W*. Water (less than 40 acres)								
WaTER*. Water (greater than 40 acres)								

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE K1.--WATER FEATURES

("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text. The symbol < means less than; > means more than. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Soil name and map symbol	Hydrologic group	Flooding: Frequency	Flooding: Duration	Flooding: Months	High water table: Depth	High water table: Kind	High water table: Months
					Ft		
AcB, AdB, AoC: Acton	B	None	---	---	2.0-4.0	Apparent	Nov-May
AfA, AfB: Agawam	B	None	---	---	>6.0	---	---
AgA, AgB: Au Gres	B	None	---	---	1.5-3.0	Apparent	Nov-May
AuB: Au Gres	B	None	---	---	0.5-1.5	Apparent	Oct-Jun
BcB: Belgrade	B	None	---	---	1.5-3.5	Apparent	Nov-Apr
CaC*:							
Canaan	C/D	None	---	---	>6.0	---	---
Hermon	B	None	---	---	>6.0	---	---
CaD*, ChD*:							
Canaan	C/D	None	---	---	>6.0	---	---
Hermon	B	None	---	---	>6.0	---	---
ChE*:							
Canaan	C/D	None	---	---	>6.0	---	---
Hermon	B	None	---	---	>6.0	---	---
CoA, CoB, CoC, CtE: Colton	A	None	---	---	>6.0	---	---
DuB: Duane	B	None	---	---	1.5-2.0	Apparent	Feb-May
GcB, GcC, GcD, GrB, GrC, GrD, GrE, GsD, GsE: Gloucester	C	None	---	---	2.0-3.5	Perched	Mar-Apr
Gv*. Gravel pits							
HmB, HmC, HmD, HnB, HnC, HnD, HoD, HoE: Hermon	B	None	---	---	>6.0	---	---
HrE, HsA, HsB, HsC: Hinckley	A	None	---	---	>6.0	---	---
Lm: Limerick	C	None	---	---	0.5-2.0	Apparent	Nov-May
Ma*. Made land							

See footnote at end of table.

TABLE K1.--WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table		
		Frequency	Duration	Months	Depth	Kind	Months
					Ft		
Mh*. Marsh							
MmA, MmB, MmC Merrimac	A	None	---	---	>6.0	---	---
Mn*. Mixed alluvial land							
Mp* Muck and peat	A/D	None	---	---	+1-1.0	Apparent	Sep-Jun
NnA Ninigret	B	None	---	---	1.5-2.5	Apparent	Nov-Apr
Of Ondawa	B	Frequent	Brief	Nov-Apr	>6.0	---	---
Oh Ondawa	B	Occasional	Brief	Nov-Apr	>6.0	---	---
PaB, PaC, PaD Paxton	C	None	---	---	1.5-2.5	Perched	Feb-Apr
PnB, PnC, PnD, PnE Paxton	C	None	---	---	2.0-3.5	Perched	Mar-Apr
Po Podunk	B	Frequent	Brief	Nov-Apr	1.5-3.0	Apparent	Nov-May
RbA, RbB Ridgebury	C	None	---	---	0-1.5	Perched	Nov-May
RdA*, RdB*:							
Ridgebury	C	None	---	---	0-1.5	Perched	Nov-May
Whitman	D	None	---	---	+1-0.5	Apparent	Oct-Jun
Rh*. Riverwash							
Ro*. Rock outcrop							
Ru Rumney	C	Frequent	Brief	Oct-May	0-1.5	Apparent	Nov-May
Sa Saco	D	Frequent	Long	Mar-Oct	+1-0.5	Apparent	Sep-Jun
Sc Scarboro	D	None	---	---	+1-1.0	Apparent	Sep-Jul
SgB*, SgC*, ShC*, ShD*, SoD*, SoE*:							
Shapleigh	B	None	---	---	>6.0	---	---
Gloucester	B	None	---	---	>6.0	---	---
SuA, SuB Sudbury	B	None	---	---	1.5-3.0	Apparent	Dec-Apr

See footnote at end of table.

TABLE K1.--WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table		
		Frequency	Duration	Months	Depth	Kind	Months
					Ft		
Sy---------- Suncook	A	Occasional------	Brief---------	Mar-May	3.0-6.0	Apparent	Jan-Apr
WdA, WdB, WdC, WdE------ Windsor	A	None----------	---	---	>6.0	---	---
WoB, WoC, WvB, WvC------ Woodbridge	C	None----------	---	---	1.5-2.5	Perched	Nov-May
W*. Water (less than 40 acres)							
WaTER*. Water (greater than 40 acres)							

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE L.--SANITARY FACILITIES

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions o "slight," "good," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
AcB, AdB Acton	Severe: wetness.	Severe: seepage, wetness.
AdC Acton	Severe: wetness.	Severe: seepage, slope, wetness.
AfA, AfB Agawam	Severe: poor filter.	Severe: seepage.
AgA, AgB Au Gres	Severe: wetness, poor filter.	Severe: wetness, seepage.
AuB Au Gres	Severe: wetness, poor filter.	Severe: seepage, wetness.
BcB Belgrade	Severe: wetness, percs slowly.	Severe: seepage, wetness.
CaC*:		
Canaan	Severe: depth to rock.	Severe: slope, depth to rock.
Herman	Moderate: slope.	Severe: seepage, slope.
CaD*, ChD*:		
Canaan	Severe: slope, depth to rock.	Severe: slope, depth to rock.
Hermon	Severe: slope.	Severe: seepage, slope.
ChE*:		
Canaan	Severe: slope, depth to rock.	Severe: slope, depth to rock.
Herman	Severe: slope.	Severe: seepage, slope.
CoA, CoB Colton	Severe: poor filter.	Severe: seepage.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
CoC: Colton	Severe: poor filter.	Severe: slope, seepage.
CtE: Colton	Severe: poor filter, slope.	Severe: slope, seepage.
DuB: Duane	Severe: wetness, poor filter.	Severe: seepage, wetness.
GcB: Gloucester	Severe: percs slowly.	Moderate: seepage, slope.
GcC: Gloucester	Severe: percs slowly.	Severe: slope.
GcD: Gloucester	Severe: percs slowly, slope.	Severe: slope.
GrB: Gloucester	Severe: percs slowly.	Moderate: seepage, slope.
GrC: Gloucester	Severe: percs slowly.	Severe: slope.
GrD, GrE, GsD, GsE: Gloucester	Severe: percs slowly, slope.	Severe: slope.
Gv*. Gravel pits		
HmB: Hermon	Slight	Severe: seepage.
HmC: Hermon	Moderate: slope.	Severe: seepage, slope.
HmD: Hermon	Severe: slope.	Severe: seepage, slope.
HnB: Hermon	Slight	Severe: seepage.
HnC: Hermon	Moderate: slope.	Severe: seepage, slope.
HnD, HoD, HoE: Hermon	Severe: slope.	Severe: seepage, slope.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
HrE Hinckley	Severe: poor filter, slope.	Severe: seepage, slope.
HsA, HsB Hinckley	Severe: poor filter.	Severe: seepage.
HsC Hinckley	Severe: poor filter.	Severe: seepage, slope.
La Limerick	Severe: percs slowly, wetness.	Severe: wetness.
Ma*. Made land		
Mh*. Marsh		
MmA, MmB Merrimac	Severe: poor filter.	Severe: seepage.
MmC Merrimac	Severe: poor filter.	Severe: slope, seepage.
Mn*. Mixed alluvial land		
Mp* Muck and peat	Severe: subsides, ponding.	Severe: seepage, excess humus, ponding.
NnA Ninigret	Severe: wetness, poor filter.	Severe: seepage, wetness.
Of, Oh Ondawa	Severe: flooding, poor filter.	Severe: flooding, seepage.
PaB Paxton	Severe: percs slowly.	Moderate: slope.
PaC Paxton	Severe: percs slowly.	Severe: slope.
PaD Paxton	Severe: percs slowly, slope.	Severe: slope.
PnB Paxton	Severe: percs slowly.	Moderate: seepage, slope.
PnC Paxton	Severe: percs slowly.	Severe: slope.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
PnD, PnE: Paxton	Severe: percs slowly, slope.	Severe: slope.
Po: Podunk	Severe: flooding, wetness, poor filter.	Severe: flooding, wetness, seepage.
RbA: Ridgebury	Severe: wetness, percs slowly.	Slight.
RbB: Ridgebury	Severe: wetness, percs slowly.	Moderate: slope.
RdA*, RdB*:		
Ridgebury	Severe: wetness, percs slowly.	Severe: wetness.
Whitman	Severe: ponding, percs slowly.	Severe: excess humus, ponding.
Rh*. Riverwash		
Ro*. Rock outcrop		
Ru: Rumney	Severe: flooding, wetness, poor filter.	Severe: flooding, wetness, seepage.
Sa: Saco	Severe: flooding, ponding.	Severe: flooding, ponding.
Sc: Scarboro	Severe: ponding, poor filter.	Severe: seepage, excess humus, ponding.
SgB*:		
Shapleigh	Severe: depth to rock.	Severe: seepage, depth to rock.
Gloucester	Severe: poor filter.	Severe: seepage.
SgC*:		
Shapleigh	Severe: depth to rock.	Severe: seepage, depth to rock, slope.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
SgC*:		
Gloucester	Severe: poor filter.	Severe: seepage, slope.
ShC*:		
Shapleigh	Severe: depth to rock.	Severe: seepage, depth to rock, slope.
Gloucester	Moderate: large stones, slope.	Severe: slope, seepage.
ShD*, SoD*, SoE*:		
Shapleigh	Severe: depth to rock, slope.	Severe: seepage, depth to rock, slope.
Gloucester	Severe: slope.	Severe: slope, seepage.
SuA, SuB	Severe: wetness, poor filter.	Severe: wetness, seepage.
Sudbury		
Sy	Severe: flooding, poor filter.	Severe: flooding, seepage.
Suncook		
WdA, WdB	Severe: poor filter.	Severe: seepage.
Windsor		
WdC	Severe: poor filter.	Severe: seepage, slope.
Windsor		
WdE	Severe: poor filter, slope.	Severe: seepage, slope.
Windsor		
WoB	Severe: wetness, percs slowly.	Moderate: slope.
Woodbridge		
WoC	Severe: wetness, percs slowly.	Severe: slope.
Woodbridge		
WvB	Severe: wetness, percs slowly.	Moderate: seepage, slope.
Woodbridge		
WvC	Severe: wetness, percs slowly.	Severe: slope.
Woodbridge		

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas
W*. Water (less than 40 acres)		
WaTER*. Water (greater than 40 acres)		

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE M.--BUILDING SITE DEVELOPMENT

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
AcB: Acton	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: low strength, wetness, frost action.
AdB: Acton	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness, frost action.
AdC: Acton	Severe: cutbanks cave, wetness.	Moderate: slope, wetness.	Severe: wetness.	Severe: slope.	Moderate: wetness, slope, frost action.
AfA: Agawam	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
AfB: Agawam	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
AgA: Au Gres	Severe: wetness, cutbanks cave.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Severe: frost action.
AgB: Au Gres	Severe: wetness, cutbanks cave.	Moderate: wetness.	Severe: wetness.	Moderate: slope, wetness.	Severe: frost action.
AuB: Au Gres	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
BcB: Belgrade	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.
CaC*:					
Canaan	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.
Herman	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
CaD*, ChD*:					
Canaan	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, slope.
Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
ChE*:					
Canaan	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, slope.
Herman	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
CoA Colton	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
CoB Colton	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
CoC Colton	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
CtE Colton	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
DuB Duane	Severe: cutbanks cave, wetness.	Moderate: wetness, large stones.	Severe: wetness.	Moderate: wetness, slope, large stones.	Moderate: wetness, large stones.
GcB Gloucester	Moderate: wetness.	Slight	Moderate: wetness.	Moderate: slope.	Moderate: frost action.
GcC Gloucester	Moderate: wetness, slope.	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: slope, frost action.
GcD Gloucester	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
GrB Gloucester	Moderate: wetness.	Slight	Moderate: wetness.	Moderate: slope.	Moderate: frost action.
GrC Gloucester	Moderate	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: slope, frost action.
GrD, GrE, GsD, GsE Gloucester	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Gv*. Gravel pits					
HmB Hermon	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
HmC Hermon	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
HmD Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
HnB: Hermon	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
HnC: Hermon	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
HnD, HoD, HoE: Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
HrE: Hinckley	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
HsA: Hinckley	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
HsB: Hinckley	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
HsC: Hinckley	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
Lm: Limerick	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: frost action, wetness.
Ma*. Made land					
Mh*. Marsh					
MmA: Merrimac	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
MmB: Merrimac	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
MmC: Merrimac	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
Mn*. Mixed alluvial land					
Mp*: Muck and peat	Severe: excess humus, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: ponding, frost action, subsides.
NnA: Ninigret	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Severe: frost action.
Of, Oh: Ondawa	Severe: cutbanks cave.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Severe: flooding.
PaB: Paxton	Moderate: dense layer, wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness, slope.	Moderate: wetness, frost action.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
PaC: Paxton	Moderate: dense layer, wetness, slope.	Moderate: wetness, slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: wetness, slope, frost action.
PaD: Paxton	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
PnB: Paxton	Moderate: dense layer, wetness.	Slight	Moderate: wetness.	Moderate: slope.	Moderate: frost action.
PnC: Paxton	Moderate: dense layer, wetness, slope.	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: slope, frost action.
PnD, PnE: Paxton	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Po: Podunk	Severe: cutbanks cave, wetness.	Severe: flooding.	Severe: flooding, wetness.	Severe: flooding.	Severe: flooding, frost action.
RbA, RbB: Ridgebury	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.
RdA*, RdB*:					
Ridgebury	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.
Whitman	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding, frost action.
Rh*. Riverwash					
Ro*. Rock outcrop					
Ru: Rumney	Severe: wetness, cutbanks cave.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness, frost action.
Sa: Saco	Severe: ponding.	Severe: flooding, ponding.	Severe: flooding, ponding.	Severe: flooding, ponding.	Severe: ponding, flooding, frost action.
Sc: Scarboro	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
SgB*:					
Shapleigh	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: slope, depth to rock.	Moderate: depth to rock, frost action.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
SgB*:					
Gloucester	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
SgC*, ShC*:					
Shapleigh	Severe: depth to rock.	Moderate: slope, depth to rock.	Severe: depth to rock.	Severe: slope.	Moderate: slope, depth to rock, frost action.
Gloucester	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
ShD*, SoD*, SoE*:					
Shapleigh	Severe: depth to rock, slope.	Severe: slope.	Severe: depth to rock, slope.	Severe: slope.	Severe: slope.
Gloucester	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
SuA Sudbury	Severe: wetness, cutbanks cave.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness, frost action.
SuB Sudbury	Severe: wetness, cutbanks cave.	Moderate: wetness.	Severe: wetness.	Moderate: slope, wetness.	Moderate: wetness, frost action.
Sy Suncook	Severe: cutbanks cave.	Severe: flooding.	Severe: flooding.	Severe: flooding.	Severe: flooding.
WdA Windsor	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
WdB Windsor	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
WdC Windsor	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.
WdE Windsor	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
WoB Woodbridge	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.
WoC Woodbridge	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.
WvB Woodbridge	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.
WvC Woodbridge	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
W*. Water (less than 40 acres)					
WaTER*. Water (greater than 40 acres)					

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE N.--CONSTRUCTION MATERIALS

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "good," "fair," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
AcB Acton	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Fair: small stones.
AdB, AdC Acton	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
AfA, AfB Agawam	Good	Probable	Probable	Poor: too sandy, area reclaim.
AgA, AgB Au Gres	Fair: wetness.	Probable	Improbable: too sandy.	Fair: small stones, thin layer.
AuB Au Gres	Poor: wetness.	Probable	Improbable: too sandy.	Poor: wetness.
BcB Belgrade	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Fair: too sandy, area reclaim.
CaC*:				
Canaan	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Herman	Good	Probable	Improbable: too sandy.	Poor: small stones.
CaD*, ChD*:				
Canaan	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Herman	Fair: slope.	Probable	Improbable: too sandy.	Poor: small stones, slope.
ChE*:				
Canaan	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Herman	Poor: slope.	Probable	Improbable: too sandy.	Poor: small stones, slope.
CoA, CoB, CoC Colton	Good	Probable	Probable	Poor: small stones, too sandy.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
CtE Colton	Poor: slope.	Probable	Probable	Poor: slope, small stones, too sandy.
DuB Duane	Fair: large stones, wetness.	Probable	Probable	Poor: small stones, area reclaim.
GcB, GcC Gloucester	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
GcD Gloucester	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
GrB, GrC Gloucester	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
GrD Gloucester	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
GrE Gloucester	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
GsD Gloucester	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
GsE Gloucester	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Gv*. Gravel pits				
HmB Hermon	Good	Probable	Improbable: too sandy.	Fair: small stones.
HmC Hermon	Good	Probable	Improbable: too sandy.	Fair: small stones, slope.
HmD Hermon	Fair: slope.	Probable	Improbable: too sandy.	Poor: slope.
HnB, HnC Hermon	Good	Probable	Improbable: too sandy.	Poor: small stones.
HnD Hermon	Fair: slope.	Probable	Improbable: too sandy.	Poor: small stones, slope.
HoD Hermon	Fair: slope.	Probable	Improbable: too sandy.	Poor: large stones, small stones, slope.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
HoE Hermon	Poor: slope.	Probable	Improbable: too sandy.	Poor: large stones, small stones, slope.
HrE Hinckley	Poor: slope.	Probable	Probable	Poor: too sandy, small stones, slope.
HsA, HsB, HsC Hinckley	Good	Probable	Probable	Poor: too sandy, area reclaim, small stones.
La Limerick	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
Ma*. Made land				
Mh*. Marsh				
MmA, MmB, MmC Merrimac	Good	Probable	Probable	Poor: small stones, area reclaim.
Mn*. Mixed alluvial land				
Mp* Muck and peat	Poor: wetness, low strength.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
NnA Ninigret	Fair: wetness.	Probable	Probable	Poor: small stones, area reclaim.
Of, Oh Ondawa	Good	Probable	Improbable: too sandy.	Fair: thin layer, small stones.
PaB Paxton	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones.
PaC Paxton	Good	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones, slope.
PaD Paxton	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: slope.
PnB, PnC Paxton	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
PnD Paxton	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
PnE: Paxton	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Po: Podunk	Fair: wetness.	Probable	Improbable: too sandy.	Fair: small stones, thin layer, area reclaim.
RbA, RbB: Ridgebury	Poor: thin layer, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
RdA*, RdB*:				
Ridgebury	Poor: thin layer, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, wetness.
Whitman	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, excess humus, small stones.
Rh*. Riverwash				
Ro*. Rock outcrop				
Ru: Rumney	Poor: wetness.	Probable	Improbable: too sandy.	Poor: wetness, small stones, area reclaim.
Sa: Saco	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
Sc: Scarboro	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
SgB*, SgC*:				
Shapleigh	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Gloucester	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim.
ShC*:				
Shapleigh	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Gloucester	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
ShD*, SoD*:				
Shapleigh	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
ShD*, SoD*:				
Gloucester	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
SoE*:				
Shapleigh	Poor: area reclaim, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Gloucester	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
SuA, SuB	Fair: wetness.	Probable	Probable	Poor: small stones, too sandy, area reclaim.
Sy	Good	Probable	Probable	Poor: too sandy.
Suncook				
WdA, WdB, WdC	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Windsor				
WdE	Poor: slope.	Probable	Improbable: too sandy.	Poor: too sandy, slope.
Windsor				
WoB	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones.
Woodbridge				
WoC	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Fair: area reclaim, small stones, slope.
Woodbridge				
WvB, WvC	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Woodbridge				
W*. Water (less than 40 acres)				
WATER*. Water (greater than 40 acres)				

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE Y.--PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
AcB	Acton fine sandy loam, 0 to 8 percent slopes
AfA	Agawam very fine sandy loam, 0 to 3 percent slopes
AfB	Agawam very fine sandy loam, 3 to 8 percent slopes
BcB	Belgrade silt loam, 0 to 8 percent slopes
GcB	Gloucester sandy loam, 3 to 8 percent slopes
HmB	Hermon sandy loam, 3 to 8 percent slopes
NnA	Ninigret very fine sandy loam, 0 to 3 percent slopes
Of	Ondawa fine sandy loam
Oh	Ondawa fine sandy loam, high bottom
PaB	Paxton loam, 0 to 8 percent slopes
Po	Podunk fine sandy loam
Ru	Rumney fine sandy loam (where drained and either protected from flooding or not frequently flooded during the growing season)
WoB	Woodbridge loam, 0 to 8 percent slopes

Reservoir project was authorized by an Act of Congress