United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with United States Forest Service

Vermont Agency of Natural Resources

Vermont Agricultural Experiment Station

Vermont Center for Geographic Information

Soil Survey of Bennington County, Vermont

How To Use This Soil Survey

General Soil Map

The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

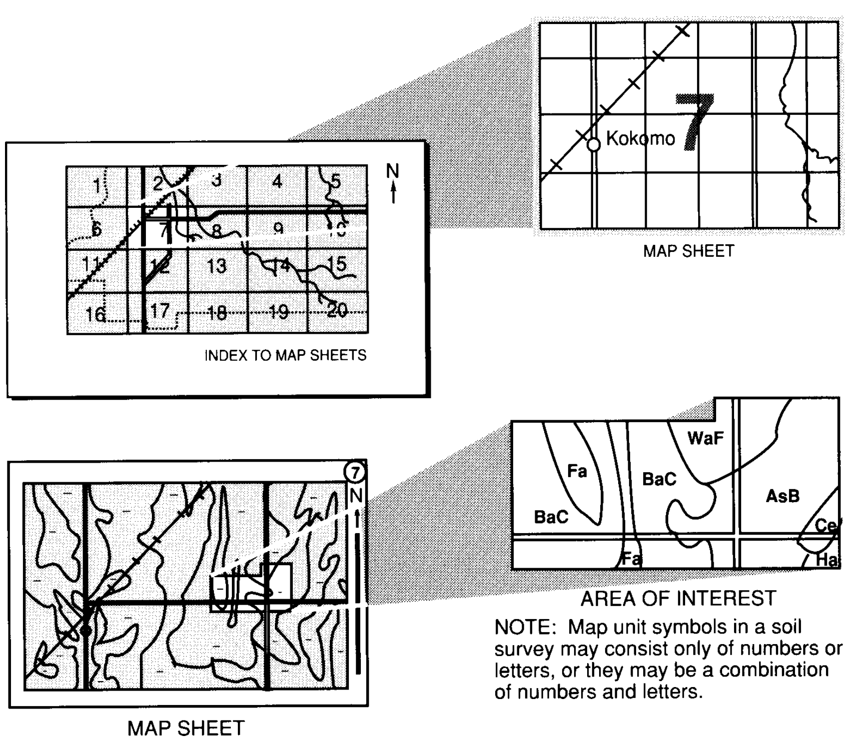
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1986. Soil names and descriptions were approved in 1992. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1992. This survey was made cooperatively by the Natural Resources Conservation Service and the United States Forest Service, Vermont Agency of Natural Resources, Vermont Agricultural Experiment Station, and the Vermont Center for Geographic Information. The survey is part of the technical assistance furnished to the Bennington Natural Resources Conservation District.

Cover: Alfalfa and young Christmas trees on Stockbridge loam, 8 to 15 percent slopes. Woodland consists of Galway-Farmington complex, 25 to 50 percent slopes, very rocky, and Macomber-Taconic complex, 25 to 60 percent slopes, rocky.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

Issued April 2006

Foreword

This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations that affect various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are unsuited to use as septic tank absorption fields. A high water table makes a soil unsuited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

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State Conservationist
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Soil Survey of
Bennington County, Vermont

By Carl Britt, Roderick Douglas, and Thomas Villars
Natural Resources Conservation Service

Fieldwork by Carl Britt, Louis Dondero, Roderick Douglas, and Thomas Villars,
Natural Resources Conservation Service and
Donna Duffy, Fred Putnam Jr., and Martha Mitchell, United States Forest Service

United States Department of Agriculture, Natural Resources Conservation Service,
in cooperation with
the United States Forest Service, Vermont Agency of Natural Resources, Vermont
Agricultural Experiment Station, and Vermont Center for Geographic Information

This soil survey updates the reconnaissance soil survey of Vermont published in 1930. It provides additional information and has larger maps, which show the soils in greater detail.

General Nature of the County

BENNINGTON COUNTY is in the southwestern part of Vermont (fig. 1). The area of the county is about 673 square miles, or 433,500 acres. There are two county seats; Bennington in the South Shire and Manchester in the North Shire.

About 86 percent of the land area in the county is in woodland, about 10 percent is used for dairying and other farm enterprises, and about 4 percent is urban or built-up land.

This soil survey updates the Soil Survey (Reconnaissance) of Vermont, published in 1930, which contained information about the soils of Bennington County (Bureau of Chemistry and Soils, 1930). This new survey provides additional information and larger scale maps that show the distribution and extent of the soils in greater detail.

General Nature of the Survey Area

Gregory Burke, Executive Director of the Bennington County Regional Commission, provided assistance in the preparation of this section.

This section provides general information about Bennington County. It discusses climate, history and development, farming, industry, and transportation. This section also describes the physiography, geology, and drainage of the survey area.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Dorset, VT in the period 1961 to 1986. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is 22 degrees F and the average daily minimum

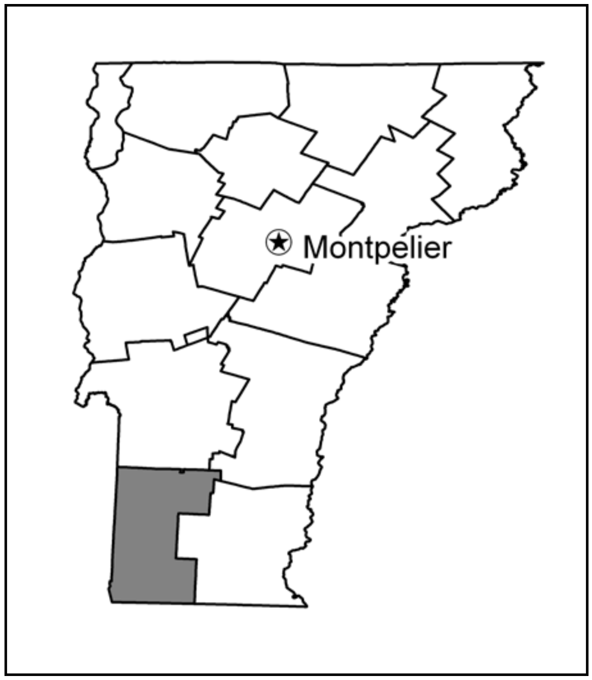

Figure 1.—Location of Bennington County in Vermont.

temperature is 11 degrees. The lowest temperature on record is -30 degrees. In summer, the average temperature is 65 degrees and the average daily maximum temperature is 78 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 46 inches. Of this, 27 inches, or 57 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 17 inches. The heaviest 1-day rainfall during the period of record was 4.40 inches on August 26, 1961. Thunderstorms occur on about 27 days each year, and most occur in the summer.

The average seasonal snowfall is about 72 inches. The greatest snow depth at any one time during the period of record was 38 inches. On the average, 51 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

The average relative humidity in mid-afternoon is about 55 percent. Humidity is higher at night, and the average at dawn is about 80 percent. The sun shines 60 percent of the time possible in summer and 45 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 11 miles per hour, in spring.

History and Development

The first township granted in what is now known as the State of Vermont was Bennington in 1749, named in honor of Gov. Benning Wentworth of New Hampshire.

The first party of settlers arrived in Bennington around 1761. Before settlement, the area was known as “The Wilderness”, and was used as hunting grounds by the Iroquois and Algonquin Indians.

Figure 2.—Farming on Dutchess channery loam, 8 to 15 percent slopes. In the background, woodland on Galway-Farmington complex, 15 to 25 percent slopes, very rocky.

In 1980, the population of Bennington County was 33,345. This represents a 33 percent increase from the 1960 population of 25,088. There are 17 towns in the county. In 1980, the population of Glastenbury, the smallest town in terms of population, was 3, while that of Bennington, the largest town, was approximately 16,000.

Most of the population in the county is centered in Bennington and Manchester and the surrounding towns.

Farming

In the late 19th century, the land use pattern in Bennington County was highly diversified. There were several thousand farms encompassing almost half the acreage in the county. There were large stocks of cows, sheep, horses, swine, and oxen. The main agricultural products were wool, meat, butter, and cheese. The main field crops were barley, buckwheat, corn, oats, rye, wheat, hay, hops, potatoes, tobacco and fruit.

In 1982, there were 193 farms on 41,281 acres. Of this total, 17,009 acres were used as cropland. The average size of an individual farm was 214 acres (USDC, 1982).

Dairy farming is the main agricultural enterprise (fig. 2). The number of dairy farms has steadily decreased, but the number of cows has recently increased. Fluid milk, the main agricultural product, is shipped to Boston and New York. Vegetables, fruit, maple syrup, hay and Christmas trees are also grown in the county.

In October 1946, the Bennington County Natural Resources Conservation District was formed to assist landowners in controlling soil erosion and pollution.

Industry and Transportation

Along with agriculture, forest products, manufacturing, commerce, tourism and services make up the economic picture of Bennington County. The major natural resource of the county is woodland, which provides lumber, pulp and firewood. The manufacturing sector consists of electronic products, furniture, plastic molding, clothing, containers, fishing tackle, and iron and steel products.

Bennington County is accessible to the metropolitan areas in the Northeast by interstate highways to the east and west of the county. U.S. Route 7 is the major north-south artery and Vermont Routes 9, 11, and 30 run generally east-west in the county. Commercial bus service is available along major highways.

Rail freight service is provided by the Vermont Railway and the Boston and Maine Railroad.

The Bennington State Airport is located west of Bennington on Vermont Route 9.

Physiography, Geology, and Drainage

Bennington County is divided into three physiographic regions: the Green Mountains, the Vermont Valley, and the Taconic Mountains. The Green Mountains cover about 50 percent of the county. The Vermont Valley and the Taconic Mountains make up the other 50 percent.

The Green Mountains are part of a mountain range that runs north-south throughout central Vermont. They lie along the entire eastern portion of Bennington County. The landscape includes steep mountains and broad rolling uplands. Most of this region is in woodland.

The Vermont Valley runs north-south through the central part of the county. Most of the major rivers in the county are in this region, including the Battenkill and the Walloomsac, Mettawee, and Hoosic Rivers. Most of the agricultural land in the county is in this region, because of its gentle landscape and well-suited soils.

The Taconic Mountains are part of a mountain range that extends southwestward into New York and Massachusetts. They lie along the western boundary of the county. The landscape of steep mountains and narrow valleys is very rugged. Most of this region is in woodland. There is some agricultural land in the valleys.

The highest elevation in the county is 3,816 feet at the summit of Mount Equinox in the north-central part of the county. The lowest elevation is approximately 520 feet along the Battenkill at the Vermont-New York state line.

The soils in Bennington County formed in material that was laid down directly by the last glacier or indirectly by the action of post-glacial streams and ice-dammed lakes. Present-day streams carry along some of this glacial material and redeposit it as alluvium.

Glaciation in the county resulted in the deposition of till on uplands and outwash sands and gravel and lacustrine silts and fine sands in valleys along streams and in old lake beds.

The distribution of the various types of bedrock in the county is complex. Bedrock in the Green Mountains consists of phyllite, gneiss, and schist. In the Vermont Valley, the bedrock is limestone, marble and dolostone. The Taconic Mountains are underlain by phyllite and slate. Many soils in the county are associated with specific types of bedrock. For example, the Farmington and Galway soils are found only in areas of limestone bedrock (fig. 3) and the Macomber and Taconic soils are found only in areas of phyllite and slate bedrock.

The high peaks and ridges in the Green Mountains form a north-to-south drainage divide in the county. To the east, the streams are part of the Connecticut River watershed. To the west of the Green Mountains, most streams are part of the Hudson River watershed. The Hudson River is in New York State, approximately 25 miles west of the county line. The main waterways in the Connecticut River watershed include the Deerfield River, West Branch, Mill Brook, Utley Brook, and Flood Brook. The main waterways in the Hudson River watershed include the Hoosic and Walloomsac Rivers, the Battenkill, the Green River, and White Creek. The Mettawee River and Otter Creek, in the northwestern part of the county, are part of the Lake Champlain watershed.

Figure 3.—Limestone bedrock is associated with the Nellis-Stockbridge-Georgia general soil map unit. It is within 20 inches of the surface on the Farmington soils and 40 inches of the surface on Galway soils.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

This survey area was mapped at two levels of detail. At the more detailed level, map units are narrowly defined. Map unit boundaries were plotted and verified at closely spaced intervals. At the less detailed level, map units are broadly defined. Boundaries were plotted and verified at wider intervals. The broadly defined units are indicated by a 3 digit map unit symbol, where the first digit is 2 through 9 in the legend for the detailed soil maps. The detail of mapping was selected to meet the anticipated long-term use of the survey, and the map units were designed to meet the needs for that use.

The descriptions, names, and delineations of the soils in this survey area do not fully agree with those of the soils in adjacent survey areas. Differences are the result of a better knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Survey Procedures

Major field work for this soil survey was performed in the period 1981-86. The Natural Resources Conservation Service (NRCS) was responsible for the mapping of privately owned land (approximately 318,500 acres) and the United States Forest Service was responsible for the mapping of land in the Green Mountain National Forest (approximately 115,000 acres).

The general procedures used in making this survey are described in the NRCS National Soils Handbook (USDA, 1996) and the Soil Survey Manual (USDA, 1993). The Forest Service also followed procedures described in the report, “Procedures for Designing, Inventorying and Presenting Information of Ecosystems” (Alvis, unpublished) and other Forest Service manuals.

A detailed description of the procedures followed by each agency is given below.

Natural Resources Conservation Service Procedures

Before field work begins, soil scientists study existing geologic and geographical references for the county. These include maps of the surficial and bedrock geology and climatic data.

During mapping, traverses are made on foot over the county at intervals of about one-quarter mile. In the valleys, traverses are made at closer intervals because the soils tend to be more variable. Traverses are made farther apart in the mountains, where soil patterns are more predictable and the land use less intensive than in the valleys.

Soil examinations along traverses are made 20 to 300 yards apart, depending on the landscape and soil complexity. Observations of landforms, trees and other vegetation, roadcuts and other man-made excavations, rock outcrops, and stones on the surface are made continuously. Soil boundaries are determined on the basis of soil examinations, observations, and aerial photo interpretation. The soil material is examined with the use of hand tools to a depth of about 5 feet, or to the contact with bedrock or dense basal till, if less than 5 feet in depth. Soil boundaries and symbols are recorded on aerial photographs.

Soil scientists record information concerning land use, map unit composition and soil characteristics on field notes. Information on soil depth to bedrock and surface stoniness is obtained for selected areas using detailed transects and then extrapolated into other areas.

Some soils are studied in large pits dug with a backhoe. Soil samples of the different soil horizons are sent to the National Soil Survey Laboratory in Lincoln, Nebraska for complete analysis. The data is stored in a computerized file at the lab and is available on request, along with a description of lab procedures.

Samples of very poorly drained organic soils are obtained during the winter months when swamps are frozen. The analysis of the organic material is performed in the local field office.

After completion of soil mapping, map unit delineations and surface drainage features are transferred by hand to orthophotographs at a scale of 1:20,000. Cultural features are transferred from USGS topographical maps and verified in the field.

United States Forest Service Procedures

The United States Forest Service used an Ecological Classification System to describe the vegetation and soils in the Green Mountain National Forest in Bennington County. The system provides for the location and identification of natural segments of the landscape and their associated management concerns related to land use in the National Forest.

Prior to field work, Subsections of the Ecological Classification System are delineated on 1:500,000 LANDSAT photographs. These subsections are based on geology, climate, landscape morphology and forest cover type distribution. Within each subsection, Ecological Land Types (ELT) are delineated on 1:42,000 aerial photographs using air photo interpretation. A set of field data points are established on these maps for sampling to provide information for each ELT.

Each field data point is visited and information is collected through transects. Map unit boundaries are modified as necessary and additional field data points are established as needed to fully characterize each ELT. Field observations include soil type, hydrology, landform, and vegetation succession tendencies. Vegetation data includes species and abundance of five different layers of above-ground vegetation. Tree cores and height information is obtained at each field data point.

Data for each ELT is then summarized and interpreted. The soil types in each ELT are correlated to soil associations. These associations are composed of several soil series and a broad range of slope classes and are therefore not as narrowly defined as mapping outside of National Forest.

General Soil Map Units

The general soil map at the back of this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one map unit can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

Soil Descriptions

1. Glebe-Stratton

Shallow to moderately deep to bedrock, well drained, moderately steep to steep soils on ridges and mountains

Setting

Landform: Ridges and mountains
Slope range: *15 to 60 percent*

Composition

Extent of the map unit: 3 percent of the survey area
Extent of the components:
Glebe soils—39 percent
Stratton soils—16 percent
Minor soils—45 percent

Soil Properties

Glebe soils
Depth class to bedrock: Moderately deep
Drainage class: Well drained
Position on the landform: Summits, shoulders, backslopes
Parent material: Loamy till
Slope class: Moderately steep to steep

Stratton soils
Depth class to bedrock: Shallow
Drainage class: Well drained

Position on the landform: Summits, shoulders, backslopes
Parent material: Loamy till
Slope class: Moderately steep to steep

Minor Soils
Hogback soils—On ridges and summits, shoulders, and backslopes of hills and mountains
Houghtonville soils—On ridges and backslopes of hills and mountains
Londonderry soils—On summits, shoulders, and backslopes on mountains
Rawsonville soils—On ridges and summits, shoulders, and backslopes of hills and mountains

Use and Management

Major uses: Woodland
Management concerns: Depth to bedrock, slope, fragile nature of the soils

2. Houghtonville-Rawsonville-Mundal

Moderately deep to very deep to bedrock, moderately well drained and well drained, gently sloping to very steep soils on mountains, hills, and ridges

Setting

Landform: Mountains, hills, and ridges
Slope range: 3 to 70 percent

Composition

Extent of the map unit: 32 percent of the survey area
Extent of the components:
Houghtonville soils—27 percent
Rawsonville soils—25 percent
Mundal soils—25 percent
Minor soils—23 percent

Soil Properties

Houghtonville soils
Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: On ridges and backslopes of hills and mountains
Parent material: Loamy till
Slope class: Gently sloping to steep

Rawsonville soils
Depth class to bedrock: Moderately deep
Drainage class: Well drained
Position on the landform: On ridges and summits, shoulders, and backslopes of hills and mountains
Parent material: Loamy till
Slope class: Strongly sloping to very steep

Mundal soils
Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: ridges and footslopes and backslopes of hills and mountains

Parent material: Loamy dense basal till
Slope class: Gently sloping to steep

Minor Soils

Berkshire soils—On ridges and on summits, shoulders, and backslopes of knolls, hills, and mountains
Cabot soils—In depressions and drainageways and on toeslopes and footslopes of hills, ridges, and mountains
Hogback soils—On ridges and summits, shoulders, and backslopes of hills and mountains
Lyman soils—On ridges and summits, shoulders, and backslopes of knolls, hills, and mountains
Monadnock soils—On knolls and ridges and footslopes and backslopes of hills and mountains
Tunbridge soils—On ridges and summits, shoulders, and backslopes of knolls, hills, and mountains
Wilmington soils—In depressions and drainageways on uplands

Use and Management

Major uses: Woodland
Management concerns: Slope, depth to bedrock (Rawsonville soils), depth to dense material and wetness (Mundal soils)

3. Berkshire-Peru-Tunbridge

Moderately deep to very deep to bedrock, moderately well drained and well drained, gently sloping to very steep soils on knolls, hills, ridges, and mountains.

Setting

Landform: Knolls, hills, ridges, and mountains
Slope range: 3 to 70 percent

Composition

Extent of the map unit: 23 percent of the survey area
Extent of the components:
Berkshire soils—34 percent
Peru soils—13 percent
Tunbridge soils—9 percent
Minor soils—44 percent

Soil Properties

Berkshire soils

Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: On ridges and on summits, shoulders, and backslopes of knolls, hills, and mountains
Parent material: Loamy till
Slope class: Gently sloping to very steep

Peru soils

Depth class to bedrock: Very deep
Drainage class: Moderately well drained

Position on the landform: On ridges and footslopes and backslopes of hills and mountains
Parent material: Loamy dense basal till
Slope class: Gently sloping to moderately steep

Tunbridge soils
Depth class to bedrock: Moderately deep
Drainage class: Well drained
Position on the landform: On ridges and summits, shoulders, and backslopes of knolls, hills, and mountains
Patent material: Loamy till
Slope class: Gently sloping to very steep

Minor Soils
Cabot soils—In depressions and drainageways and on toeslopes and footslopes of hills, ridges, and mountains
Houghtonville soils—On ridges and backslopes of hills and mountains
Lyman soils—On ridges and summits, shoulders, and backslopes of knolls, hills, and mountains
Monadnock soils—On knolls and ridges and footslopes and backslopes of hills and mountains
Rawsonville soils—On ridges and summits, shoulders, and backslopes of hills and mountains

Use and Management

Major uses: Woodland
Management concerns: Slope, depth to bedrock (Tunbridge soils), depth to dense material and wetness (Peru soils)

4. Copake-Groton

Very deep to bedrock, well drained to excessively drained, nearly level to steep soils on stream terraces, terrace escarpments and backslopes of knolls and ridges

Setting

Landform: Stream terraces, terrace escarpments, and backslopes of knolls and ridges
Slope range: 0 to 60 percent

Composition

Extent of the map unit: 8 percent of the survey area
Extent of the components:
Copake soils—45 percent
Groton—9 percent
Minor soils—46 percent

Soil Properties

Copake soils
Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: On stream terraces, terrace escarpments, and backslopes of knolls and ridges
Parent material: Loamy over sandy glaciofluvial deposits

Slope class: Nearly level to steep

Groton soils
Depth class to bedrock: Very deep
Drainage class: Excessively drained
Position on the landform: On stream terraces and terrace escarpments
Parent material: Loamy over sandy glaciofluvial deposits
Slope class: Nearly level to steep

Minor Soils
Adrian soils—In marshes and swamps
Carlisle soils—In marshes and swamps
Colton soils—On stream terraces, terrace escarpments, and knolls
Freedon soils—In depressions and drainageways on low stream terraces
Hero soils—On stream terraces
Occum soils—On floodplains
Pootatuck soils—On floodplains
Saco soils—On floodplains
Windsor soils—On stream terraces, terrace escarpments, on summits, shoulders, and backslopes of knolls and ridges

Use and Management

Major uses: Farming, woodland, source of sand and gravel
Management concerns: Slope and droughtiness (Copake and Groton soils)

5. Nellis-Stockbridge-Georgia

Very deep to bedrock, moderately well drained and well drained, nearly level to steep soils on knolls, hills, and ridges

Setting

Landform: Knolls, hills, and ridges.
Slope range: 0 to 50 percent

Composition

Extent of the map unit: 15 percent of the survey area
Extent of the components:
Nellis soils—17 percent
Stockbridge soils—16 percent
Georgia—16 percent
Minor soils—51 percent

Soil Properties

Nellis soils
Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: On summits, shoulders, and backslopes of hills, knolls, and ridges
Parent material: Calcareous loamy till
Slope class: Gently sloping to steep

Stockbridge soils
Depth class to bedrock: Very deep
Drainage class: Well drained

Position on the landform: On summits, shoulders, and backslopes of hills, knolls, and ridges
Parent material: Loamy till
Slope class: Nearly level to moderately steep

Georgia soils
Depth class to bedrock: Very deep to bedrock
Drainage class: Moderately well drained
Position on the landform: On summits, shoulders, and backslopes of hills, knolls, and ridges
Parent material: Loamy till
Slope class: Nearly level to moderately steep

Minor Soils
Amenia soils—On summits, shoulders, and backslopes of hills, knolls, and ridges
Farmington soils—On summits, shoulders, and backslopes of hills, knolls, and ridges
Galway soils—On summits, shoulders, and backslopes of hills, knolls, and ridges
Massena soils—In depressions and drainageways on uplands
Pittsfield soils—On summits, shoulders, and backslopes of hills, knolls, and ridges

Use and Management

Major uses: Farming and woodland
Management concerns: Slope and wetness (Georgia soils)

6. Dutchess-Macomber-Taconic

Shallow to very deep to bedrock, well drained and somewhat excessively drained, gently sloping to very steep soils on knolls, hills, ridges, and mountains

Setting

Landform: Knolls, hills, ridges, and mountains
Slope range: 3 to 70 percent

Composition

Extent of the map unit: 19 percent of the survey area
Extent of the components:
Dutchess soils—45 percent
Macomber soils—21 percent
Taconic soils—17 percent
Minor soils—17 percent

Soil Properties

Dutchess soils
Depth class to bedrock: Very deep
Drainage class: Well drained
Position on the landform: On summits, shoulders, and backslopes of knolls, hills, ridges, and mountains
Parent material: Loamy till
Slope class: Gently sloping to steep

Macomber soils
Depth class to bedrock: Moderately deep
Drainage class: Well drained

Position on the landform: On summits, shoulders, and backslopes of hills, ridges, and mountains
Parent material: Loamy till
Slope class: Strongly sloping to steep

Taconic soils
Depth class to bedrock: Shallow
Drainage class: Somewhat excessively drained
Position on the landform: On summits, shoulders, and backslopes of hills, ridges, and mountains
Parent material: Loamy till
Slope class: Strongly sloping to very steep

Minor Soils
Brayton soils—In depressions and drainageways and on toeslopes and footslopes of hills and ridges
Hubbardton soils—On backslopes of hills and mountains
Mansfield soils—In depressions and drainageways on uplands
Pittstown soils—On summits, shoulders, and backslopes of knolls, hills, and ridges

Use and Management

Major uses: Farming and woodland
Management concerns: Slope and depth to bedrock (Macomber and Taconic soils)

Detailed Soil Map Units

The map units delineated on the detailed maps at the back of this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is given under the heading “Use and Management of the Soils.”

A map unit delineation on a map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils or miscellaneous areas. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils and miscellaneous areas are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some “included” areas that belong to other taxonomic classes.

Most included soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, inclusions. They may or may not be mentioned in the map unit description. Other included soils and miscellaneous areas, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, inclusions. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The included areas of contrasting soils or miscellaneous areas are mentioned in the map unit descriptions. A few included areas may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of included areas in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Copake gravelly fine sandy loam, 0 to 3 percent slopes is a phase of the Copake series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Taconic-Macomber complex, 8 to 15 percent slopes, very rocky is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Houghtonville-Monadnock association, hilly, very stony is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Adrian and Saco soils, 0 to 2 percent slopes is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Udifluvents, loamy-skeletal is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas

Soil Descriptions

3A—Copake gravelly fine sandy loam, 0 to 3 percent slopes

This soil is very deep, well drained, and nearly level. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown gravelly fine sandy loam

Subsoil:
6 to 8 inches, strong brown gravelly fine sandy loam
8 to 22 inches, olive brown and olive gravelly fine sandy loam

Substratum:
22 to 65 inches, olive very gravelly coarse sand

Included with this soil in mapping are small areas of Fredon, Groton, Hero, and Windsor soils. Fredon and Hero soils are in depressions and drainageways and

Groton and Windsor soils are throughout the map unit. Included soils make up about 20 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and very rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil and slightly acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. Some areas have excavations where sand and gravel have been removed.

This map unit is well suited to cultivated crops. There are few management concerns.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is very high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter it. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability class 1.

3B—Copake gravelly fine sandy loam, 3 to 8 percent slopes

This soil is very deep, well drained, and gently sloping. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown gravelly fine sandy loam

Subsoil:
6 to 8 inches, strong brown gravelly fine sandy loam
8 to 22 inches, olive brown and olive gravelly fine sandy loam

Substratum:
22 to 65 inches, olive very gravelly coarse sand

Included with this soil in mapping are small areas of Fredon, Groton, Hero, and Windsor soils. Fredon and Hero soils are in depressions and drainageways and

Groton and Windsor soils are throughout the map unit. Included soils make up about 20 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and very rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and slightly acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. Some areas have excavations where sand and gravel have been removed.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is very high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used as a site for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 2e.

3C—Copake gravelly fine sandy loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on stream terraces dissected by drainageways and on summits, shoulders, and backslopes of knolls and ridges.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown gravelly fine sandy loam

Subsoil:
6 to 8 inches, strong brown gravelly fine sandy loam
8 to 22 inches, olive brown and olive gravelly fine sandy loam

Substratum:
22 to 65 inches, olive very gravelly coarse sand

Included with this soil in mapping are small areas of Fredon, Groton, Hero, and Windsor soils. Fredon and Hero soils are in depressions and drainageways and Groton and Windsor soils are throughout the map unit. Included soils make up about 20 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and very rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and slightly acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. Some areas have excavations where sand and gravel have been removed.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is very high. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope and the poor filtering capacity of the soil are the main limitations if this map unit is used as a site for septic tank absorption fields. Special slope design of septic tank absorption fields is needed in some places for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 3e.

3D—Copake gravelly fine sandy loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on stream terraces dissected by drainageways and on summits, shoulders, and backslopes of knolls and ridges.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown gravelly fine sandy loam

Subsoil:
6 to 8 inches, strong brown gravelly fine sandy loam
8 to 22 inches, olive brown and olive gravelly fine sandy loam

Substratum:
22 to 65 inches, olive very gravelly coarse sand

Included with this soil in mapping are small areas of Fredon, Groton, Hero, and Windsor soils. Fredon and Hero soils are in depressions and drainageways and Groton and Windsor soils are throughout the map unit. Included soils make up about 20 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and very rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and slightly acid to moderately alkaline in the substratum

Most areas of this map unit are in woodland. Some areas are cleared and used for cultivated crops or hay and pasture. Some areas have excavations where sand and gravel have been removed.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is high. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope and poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 4e.

3E—Copake gravelly fine sandy loam, 25 to 60 percent slopes

This soil is very deep, well drained, and steep. It is on stream terrace escarpments.
The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown gravelly fine sandy loam

Subsoil:
6 to 8 inches, strong brown gravelly fine sandy loam
8 to 22 inches, olive brown and olive gravelly fine sandy loam

Substratum:
22 to 65 inches, olive very gravelly coarse sand

Included with this soil in mapping are small areas of Fredon, Groton, Hero, and Windsor soils. Fredon and Hero soils are in drainageways and Groton and Windsor soils are throughout the map unit. Included soils make up about 20 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and very rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil and slightly acid to moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture. Some areas have excavations where sand and gravel have been removed.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes.

The potential productivity for eastern white pine on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited to dwellings and septic tank absorption fields because of steep slopes.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 7e.

9—Pits-Dumps complex

Most areas of this map unit are slate and limestone quarries and associated piles of waste rock. On-site investigations are necessary to determine the hazards and degree of limitations for specific uses.

This map unit is in land capability subclass 8s.

10D—Glebe-Stratton-Londonderry complex, 15 to 25 percent slopes, very rocky

This map unit consists of moderately steep soils on summits, shoulders, and backslopes of mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent moderately deep, well drained Glebe soils; 30 percent shallow, well drained Stratton soils; 10 percent very shallow, well drained Londonderry soils; and 20 percent other soils and areas of rock outcrop. The Glebe, Stratton, and Londonderry soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Glebe soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed moss, leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 7 inches, black fine sandy loam
7 to 11 inches, dark gray gravelly fine sandy loam

Subsoil:
11 to 19 inches, very dark gray gravelly fine sandy loam
19 to 28 inches, dark reddish brown and dark yellowish brown gravelly fine sandy loam

Schist bedrock:
28 inches

The typical sequence, depth, and composition of the layers of the Stratton soils are as follows—

Organic layer:
0 to 1 inches, slightly decomposed needles, moss, and twigs

Surface soil:
1 to 5 inches, black channery silt loam
5 to 7 inches, brown very channery silt loam

Subsoil:
7 to 15 inches, dark reddish brown very channery silt loam
15 to 20 inches, reddish brown very channery silt loam

Schist bedrock:
20 inches

The typical sequence, depth, and composition of the layers of the Londonderry soils are as follows—

Organic layer:
0 to 1 inches, slightly decomposed moss, leaves, needles, and twigs

Surface soil:
1 to 4 inches, black gravelly silt loam
4 to 6 inches, dark gray gravelly fine sandy loam

Schist bedrock:
6 inches

Included with these soils in mapping are small areas of Hogback, Houghtonville, Mundal, and Rawsonville soils. Hogback and Rawsonville soils are at lower elevations of this map unit, Houghtonville soils are in areas between rock outcrops, and Mundal soils are along drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Glebe
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid throughout the soil
Potential frost action: High
Reaction: Extremely acid to strongly acid throughout the soil

Stratton
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the surface soil and subsoil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Londonderry
Available water capacity: Very low
Depth to bedrock: 2 to 10 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: D
Permeability: Moderately rapid in the organic layer and moderate in the surface soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. A few small areas are developed as ski trails.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

This map unit is not recommended for forest management because of the fragile nature of the soils.

This map unit is unsuited for dwellings, in areas of very shallow Londonderry and shallow Stratton soils. In areas of Glebe soils, the main limitations are slope and depth to bedrock. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas with slopes of greater than 20 percent and in areas of very shallow Londonderry and shallow Stratton soils. In areas of Glebe soils, the main limitations are slope and depth to bedrock. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 7s.

10E—Glebe-Stratton-Londonderry complex, 25 to 60 percent slopes, very rocky

This map unit consists of steep soils on summits, shoulders, and backslopes of mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent moderately deep, well drained Glebe soils; 30 percent shallow, well drained Stratton soils; 10 percent very shallow, well drained Londonderry soils; and 20 percent other soils and areas of rock outcrop. The Glebe, Stratton, and Londonderry soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Glebe soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed moss, leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 7 inches, black fine sandy loam
7 to 11 inches, dark gray gravelly fine sandy loam

Subsoil:
11 to 19 inches, very dark gray gravelly fine sandy loam
19 to 28 inches, dark reddish brown and dark yellowish brown gravelly fine sandy loam

Schist bedrock:
28 inches

The typical sequence, depth, and composition of the layers of the Stratton soils are as follows—

Organic layer:
0 to 1 inches, slightly decomposed needles, moss, and twigs

Surface soil:
1 to 5 inches, black channery silt loam
5 to 7 inches, brown very channery silt loam

Subsoil:
7 to 15 inches, dark reddish brown very channery silt loam
15 to 20 inches, reddish brown very channery silt loam

Schist bedrock:
20 inches

The typical sequence, depth, and composition of the layers of the Londonderry soils are as follows—

Organic layer:
0 to 1 inches, slightly decomposed moss, leaves, needles, and twigs

Surface soil:
1 to 4 inches, black gravelly silt loam
4 to 6 inches, dark gray gravelly fine sandy loam

Schist bedrock:
6 inches

Included with these soils in mapping are small areas of Hogback, Houghtonville, Mundal, and Rawsonville soils. Hogback and Rawsonville soils are at lower elevations of this map unit, Houghtonville soils are in areas between rock outcrops, and Mundal soils are along drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Glebe
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid throughout the soil
Potential frost action: High
Reaction: Extremely acid to strongly acid throughout the soil

Stratton
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the surface soil and subsoil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Londonderry
Available water capacity: Very low
Depth to bedrock: 2 to 10 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: D
Permeability: Moderately rapid in the organic layer and moderate in the surface soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. A few small areas are developed as ski trails.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface, and rock outcrops.

This map unit is not recommended for forest management because of the fragile nature of the soils.

This map unit is unsuited to dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

11F—Taconic-Hubbardton-Rock outcrop complex, 25 to 70 percent slopes, very stony

This map unit consists of steep or very steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent shallow, somewhat excessively drained Taconic soils; 30 percent very shallow, excessively drained Hubbardton soils; 10 percent rock outcrop; and 20 percent other soils. The Taconic and Hubbardton soils and rock outcrops are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—
Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

The typical sequence, depth, and composition of the layers of the Hubbardton soils are as follows—
Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, brown flaggy fine sandy loam

Subsoil:
4 to 8 inches, olive brown very channery fine sandy loam

Slate bedrock:
8 inches

The areas of rock outcrop are exposures of slate bedrock on summits, shoulders, backslopes, and escarpments.

Included with this soil in mapping are small areas of Dutchess and Macomber soils and shallow soils with less than 35 percent rock fragments. Dutchess and Macomber soils are in areas above and below rock outcrops. The shallow soils are in positions similar to the Taconic soils. These soils make up about 20 percent of the map unit.

Also included are soils with a reddish subsoil.

Important Soil Properties

Taconic
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderately rapid in the surface soil and subsoil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid or strongly acid in the surface soil and subsoil

Hubbardton
Available water capacity: Very low
Depth to bedrock: 2 to 10 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderately rapid in the surface soil and subsoil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid or strongly acid in the surface soil and subsoil

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep and very steep slopes, stones on the surface, and rock outcrops.

The potential productivity for sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. The use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited to dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

18B—Windsor loamy fine sand, 0 to 8 percent slopes

This soil is very deep, excessively drained, and nearly level or gently sloping. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 4 inches, very dark grayish brown loamy fine sand

Subsoil:
4 to 13 inches, dark yellowish brown and yellowish brown loamy fine sand
13 to 22 inches, olive brown loamy fine sand

Substratum:
22 to 65 inches, olive gray fine sand

Included with this soil in mapping are small areas of Copake, Groton, Hartland, and Hero soils. Copake, Hartland, and Groton soils are scattered throughout the map unit and the Hero soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with a redder subsoil, soils with slightly acid or neutral reaction throughout the profile, and soils with a fine sandy loam surface soil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Rapid throughout the soil
Potential frost action: Low
Reaction: very strongly acid to moderately acid in the surface soil and subsoil and very strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture. Some areas have excavations where sand has been removed.

This map unit is moderately suited to cultivated crops. The droughtiness and low natural fertility of the soil are the management concerns. Including grasses and legumes in the crop rotation, using conservation tillage that leaves crop residue on the surface, and applying additional organic matter, such as manure, helps to improve the water holding capacity and fertility of the soil. Irrigation should be considered for high value truck crops.

This map unit is moderately suited to hay and pasture. The droughtiness of the soil is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is high. The woodland management concern is seedling mortality. Using drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 3s.

18C—Windsor loamy fine sand, 8 to 15 percent slopes

This soil is very deep, excessively drained, and strongly sloping. It is on stream terraces dissected by drainageways and on summits, shoulders, and backslopes of knolls and ridges.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 4 inches, very dark grayish brown loamy fine sand

Subsoil:
4 to 13 inches, dark yellowish brown and yellowish brown loamy fine sand
13 to 22 inches, olive brown loamy fine sand

Substratum:
22 to 65 inches, olive gray fine sand

Included with this soil in mapping are small areas of Copake, Groton, Hartland, and Hero soils. Copake, Hartland, and Groton soils are scattered throughout the map unit and the Hero soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with a redder subsoil, soils with slightly acid or neutral reaction throughout the profile, and soils with a fine sandy loam surface soil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Rapid throughout the soil
Potential frost action: Low
Reaction: very strongly acid to moderately acid in the surface soil and subsoil and very strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture. Some areas are in woodland. Some areas have excavations where sand has been removed.

This map unit is poorly suited to cultivated crops. The droughtiness and low natural fertility of the soil and the hazard of erosion are the management concerns. Including grasses and legumes in the crop rotation, using conservation tillage that leaves crop residue on the surface, and applying additional organic matter, such as manure, help to improve the water holding capacity and fertility of the soil and help to control erosion. Irrigation should be considered for high value truck crops.

This map unit is moderately suited to hay and pasture. The droughtiness of the soil is a management concern. Using rotational grazing and maintaining soil fertility levels helps to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is high. The woodland management concern is seedling mortality. The use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope and the poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. A special slope design of septic tank absorption fields is needed in some places for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 4s.

18E—Windsor loamy fine sand, 15 to 60 percent slopes

This soil is very deep, excessively drained, and moderately steep or steep. It is on stream terrace escarpments.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 4 inches, very dark grayish brown loamy fine sand

Subsoil:
4 to 13 inches, dark yellowish brown and yellowish brown loamy fine sand
13 to 22 inches, olive brown loamy fine sand

Substratum:
22 to 65 inches, olive gray fine sand

Included with this soil in mapping are small areas of Copake, Groton, Hartland, and Hero soils. Copake, Hartland, and Groton soils are scattered throughout the map unit and the Hero soils are in drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with a redder subsoil, soils with slightly acid or neutral reaction throughout the profile, and soils with a fine sandy loam surface soil.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A

Permeability: Rapid throughout the soil
Potential frost action: Low
Reaction: very strongly acid to moderately acid in the surface soil and subsoil and very strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture. Some areas have excavations where sand has been removed.

This map unit is poorly suited to cultivated crops in areas of steep slopes. In moderately steep areas, the hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is poorly suited to hay and pasture in areas of steep slopes. In moderately steep areas, this map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for eastern white pine on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and seedling mortality. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. The use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit is unsuited for dwellings in areas of steep slopes. In areas of moderately steep slopes, slope is the main limitation. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

This map unit is unsuited for septic tank absorption fields in areas of steep slopes. In areas of moderately steep slopes, slope and the poor filtering capacity of the soil are the main limitations. A special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

21A—Limerick silt loam, 0 to 3 percent slopes

This soil is very deep, poorly drained, and nearly level. It is on flood plains and is flooded frequently for brief periods.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, very dark grayish brown silt loam

Substratum:
6 to 11 inches, mottled, dark grayish brown silt loam
11 to 65 inches, mottled, grayish brown silt loam

Included with this soil in mapping are small areas of Pootatuck and Saco soils and poorly drained soils with sand and gravel within 40 inches. Pootatuck soils are on slightly higher convex areas, the poorly drained soils are in positions similar to the Limerick soils, and Saco soils are in depressions and backwater areas. Included soils make up about 20 percent of the map unit.

Also included are soils with textures coarser than very fine sandy loam in the surface soil.

Important Soil Properties

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: At 0 to 1.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate throughout the soil
Potential frost action: High
Reaction: strongly acid to neutral in the surface soil and moderately acid to neutral in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay or cultivated crops and some are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of flooding and the seasonal high water table are management concerns. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination. Flooding usually occurs about every other year in the spring and lasts for brief periods. It can delay spring planting.

This map unit is moderately suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity of this map unit is very low for sugar maple. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils and the hazard of flooding.

This map unit is in land capability subclass 4w.

23A—Adrian and Saco soils, 0 to 2 percent slopes

These soils are very deep, very poorly drained, and nearly level. Saco soils are on flood plains and Adrian soils are in marshes and swamps. The Saco soils are flooded frequently for brief periods. This map unit consists of 45 percent Adrian soils; 30 percent Saco soils; and about 25 percent other soils. Individual delineations of this map unit contain areas of Adrian or Saco soils, but not necessarily areas of both soils. The Adrian and Saco soils were mapped together because they have no major differences in use and management.

The typical sequence, depth, and composition of the layers of the Adrian soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, twigs, and sphagnum moss
2 to 20 inches, black muck
20 to 35 inches, very dark gray muck

Substratum:
35 to 65 inches, gray loamy sand

The typical sequence, depth, and composition of the layers of the Saco soils are as follows—

Surface soil:
0 to 7 inches, mottled, very dark gray silt loam

Substratum:
7 to 22 inches, mottled, olive gray and very dark gray silt loam
22 to 41 inches, mottled, gray very fine sandy loam
41 to 65 inches, mottled, gray gravelly coarse sand

Included with these soils in mapping are small areas of Carlisle, Cabot, and Limerick soils. The Cabot soils are near the edges of depressions and the Carlisle and Limerick soils are in positions similar to the Saco soils. Included soils make up about 25 percent of the map unit.

Also included are small areas that are covered by standing water for most of the year.

Important Soil Properties

Adrian soils

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Ponded to 0.5 feet below the surface year round
Hydrologic group: A/D
Permeability: Moderately slow to moderately rapid in the organic layers, rapid in the mineral substratum
Potential frost action: High
Reaction: extremely acid to neutral in the organic layers and moderately acid to moderately alkaline in the mineral layers

Saco soils

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: At 0 to 0.5 feet below the surface from September to June
Hydrologic Group: D
Permeability: Moderate in the upper part, rapid in the lower part
Potential frost action: High
Reaction: strongly acid to neutral in the surface soil and upper part of the substratum and moderately acid to neutral in the lower part of the substratum

Most areas of this map unit are in woodland or wetland shrubs and grasses.

This map unit is unsuited for most uses because of very poorly drained soils and the hazard of ponding and flooding.

The map unit is in land capability subclass 5w.

24A—Carlisle mucky peat, 0 to 2 percent slopes

This soil is very deep, very poorly drained, and nearly level. It is in marshes and swamps.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:

0 to 1 inch, slightly decomposed sphagnum moss, leaves, needles, and twigs
1 to 4 inches, black mucky peat
4 to 65 inches, dark reddish brown muck

Included with this soil in mapping are small areas of Adrian, Cabot, Saco, and Wilmington soils. Cabot and Wilmington soils are near the edges of the map unit and Adrian and Saco soils are on flood plains along drainageways. These soils make up about 20 percent of the map unit.

Also included are small areas covered by standing water for most of the year.

Important Soil Properties

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Ponded to 0.5 feet below the surface year round
Hydrologic group: A/D
Permeability: Moderately slow to moderately rapid throughout the soil
Potential frost action: High
Reaction: extremely acid to strongly acid in the surface organic layer and very strongly acid to neutral below

Most areas of this map unit are in woodland or wetland shrubs and grasses (fig. 4).

This map unit is unsuited for most uses because of very poorly drained soils and the hazard of ponding.

This map unit is in land capability subclass 5w.

Figure 4.—Wetland vegetation in an area of Carlisle mucky peat, 0 to 2 percent slopes.

25B—Belgrade silt loam, 0 to 8 percent slopes

This soil is very deep, moderately well drained, and nearly level or gently sloping. It is on terraces and knolls.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, dark grayish brown silt loam

Subsoil:
9 to 15 inches, dark yellowish brown silt loam
15 to 21 inches, mottled, olive brown silt loam

Substratum:
21 to 65 inches, mottled, light olive brown silt loam

Included with this soil in mapping are small areas of Hartland, Raynham, and Windsor soils. Hartland and Windsor soils are on slightly higher convex areas and the Raynham soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils that have sand and gravel layers in the substratum.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.3 to 3.0 feet below the surface from November to April
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and slow to moderately rapid in the substratum
Potential frost action: High
Reaction: Very strongly acid to neutral in the surface soil and subsoil and slightly acid to slightly alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture and a few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for sugar on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Cutbanks of excavations are subject to caving or sloughing.

The seasonal high water table and the moderately slow or slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the moderately slow or slow permeable substratum.

This map unit is in land capability subclass 2e.

26A—Raynham silt loam, 0 to 3 percent slopes

This soil is very deep, poorly drained, and nearly level. It is on stream terraces and in depressions and drainageways.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, brown silt loam

Subsoil:
8 to 10 inches, mottled, olive brown silt loam
10 to 16 inches, mottled, olive gray silt loam

Substratum:
16 to 65 inches, mottled, firm olive gray silt

Included with this soil in mapping are small areas of Belgrade and Limerick soils and poorly drained soils with a coarse-textured substratum. Belgrade soils are on slightly higher convex areas and the Limerick soils are in low-lying areas that flood. The poorly drained soils with a coarse-textured substratum are in positions similar as Raynham soils. Included soils make up about 15 percent of the map unit.

Also included are soils with grayer colors in the subsoil and substratum. Also included are some areas that are somewhat poorly drained.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: At 0 to 2.0 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate or moderately slow in the surface soil and subsoil and slow in the substratum
Potential frost action: High
Reaction: Strongly acid to neutral in the surface soil and subsoil and moderately acid to slightly alkaline in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for cultivated crops and hay and some are in woodland.

This map unit is poorly suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is moderately suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity of this map unit is very low for sugar maple. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. Operating logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils.

This map unit is in land capability subclass 4w.

27B—Udipsamments and Udorthents, gently sloping

This map unit consists of gently sloping soils that have been altered, such as in sand and gravel pits and borrow areas. In some locations, the upper soil layers have been removed, exposing underlying sandy or gravelly layers. In other locations, the original soil has been covered with fill material. These soils are moderately well drained to excessively drained. Udipsamments and Udorthents are mapped together because there are no major differences in use and management.

A broad level of classification is used for the soils in this map unit because they are so altered that identification at the series level is not practical. This allows for a broad range of important properties.

Included with these soils in mapping are small areas of Copake, Georgia, Groton, and Pittsfield soils. The Copake, Groton, and Windsor soils are near sand and gravel pits and the Georgia and Pittsfield soils are near borrow areas composed of loamy material. Included soils make up about 15 percent of the map unit.

Most areas of this map unit are used for landfills, sand and gravel pits, or are developed. On-site investigations are necessary to determine the hazards and degree of limitations for specific uses.

This map unit is in land capability subclass 8s.

28A—Udifluvents, loamy-skeletal

This map unit consists of nearly level soils that formed in recently deposited cobbly and gravelly alluvial material. The soils are along perennial streams and rivers that frequently flood. These soils are somewhat poorly drained to excessively drained.

A broad level of classification is used for the soils in this map unit because the range of properties makes identification at the series level not practical. This allows for a broad range of important properties.

Included with this soil in mapping are small areas of Copake soils, excessively drained Groton soils, well drained Occum soils, and moderately well drained Pootatuck soils. The Copake and Groton soils are on higher knolls and stream terraces and the Occum and Pootatuck soils are on broader flood plains. Included soils make up about 15 percent of the map unit. Some map units have sand, gravel, or cobbles on the surface.

The hazard of flooding makes these soils unsuitable for most uses.

This map unit is in land capability subclass 8s.

29A—Occum fine sandy loam, 0 to 3 percent slopes

This soil is very deep, well drained, and nearly level. It is on flood plains and is frequently flooded for brief periods.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 10 inches, dark yellowish brown fine sandy loam

Subsoil:
10 to 36 inches, dark yellowish brown fine sandy loam

Substratum:
36 to 65 inches, dark yellowish brown loamy fine sand

Included with this soil in mapping are small areas of Limerick and Pootatuck soils and the well drained soils with silt loam textures in the surface soil and subsoil. Limerick and Pootatuck soils are in depressions and drainageways. The well drained soils are in positions similar to the Occum soils. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: At 4.0 to 6.0 feet below the surface from November to April
Hydrologic group: B
Permeability: Moderate or moderately rapid in the surface soil and subsoil and rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil and very strongly acid to slightly acid in the subsoil and substratum

Most areas of this map unit are cleared and used for cultivated crops and hay. A few areas are used for pasture.

This map unit is well suited to cultivated crops. The hazard of flooding is a management concern. It usually occurs about every other year in the spring and lasts for brief periods. It can delay spring planting.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for sugar maple on this map unit is high. This map unit has few woodland management concerns.

This map unit is unsuited for dwellings and septic tank absorption fields because of the hazard of flooding.

This map unit is in land capability class 1.

34A—Pootatuck fine sandy loam, 0 to 3 percent slopes

This soil is very deep, moderately well drained, and nearly level. It is on flood plains and is frequently flooded for brief periods.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 10 inches, dark yellowish brown fine sandy loam

Subsoil:
10 to 17 inches, olive brown and olive fine sandy loam
17 to 33 inches, mottled, olive fine sandy loam

Substratum:
33 to 45 inches, mottled, olive loamy fine sand
45 to 65 inches, mottled, olive gravelly loamy fine sand loamy fine sand

Included with this soil in mapping are small areas of Limerick and Occum soils. Limerick soils are in depressions and drainageways and Occum soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: High

Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.3 to 2.5 feet below the surface from November to April
Hydrologic group: B
Permeability: Moderate to moderately rapid in the surface soil and subsoil and rapid in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil and very strongly acid to slightly acid in the subsoil and substratum

Most areas of this map unit are cleared and used for cultivated crops and hay. A few areas are used for pasture.

This map unit is well suited to cultivated crops. The management concerns are the hazard of flooding and the seasonal high water table. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination. Flooding usually occurs about every other year in the spring and lasts for brief periods. It can delay spring planting.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for sugar maple on this map unit is high. This map unit has few woodland management concerns.

This map unit is unsuited as a site for dwellings or septic tank absorption fields because of the hazard of flooding.

This map unit is in land capability subclass 2w.

35B—Hartland silt loam, 0 to 5 percent slopes

This soil is very deep, well drained, and nearly level or gently sloping. It is on stream terraces, glacial lake plains, and knolls.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, brown silt loam

Subsoil:
9 to 18 inches, yellowish brown silt loam

Substratum:
18 to 32 inches, stratified olive brown and light olive brown very fine sandy loam
32 to 58 inches, stratified olive brown silt loam and yellowish brown very fine sandy loam
58 to 65 inches, stratified olive brown loamy very fine sand light yellowish brown very fine sand

Included with this soil in mapping are small areas of Belgrade and Windsor soils. Belgrade soils are in depressions and drainageways and Windsor soils are throughout the map unit. Included soils make up about 10 percent of the map unit.

Also included are soils with sand and gravel layers in the substratum.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B

Permeability: Moderate in the surface soil and subsoil and moderate to moderately slow in the substratum
Potential frost action: High
Reaction: Strongly acid to slightly alkaline throughout the soil

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture and a few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for sugar maple on this map unit is very high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings.

Moderately slow permeability of the substratum is the main limitation if this map unit is used as a site for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the substratum.

This map unit is in land capability class 1.

40B—Galway-Nellis-Farmington complex, 3 to 8 percent slopes, rocky

This map unit consists of gently sloping soils on summits, shoulders, and backslopes of knolls and ridges. Stones cover less that 0.1 percent of the surface. This map unit consists of 40 percent moderately deep, well drained Galway soils; 30 percent very deep, well drained Nellis soils; 14 percent shallow, somewhat excessively drained Farmington soils; and 16 percent other soils and areas of rock outcrop. The Galway, Nellis, and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Surface soil:
0 to 2 inches, very dark grayish brown silt loam

Subsoil:
2 to 9 inches, reddish brown loam
9 to 19 inches, yellowish red silt loam
19 to 30 inches, reddish brown very gravelly silt loam

Limestone bedrock:
30 inches

The typical sequence, depth, and composition of the layers of the Nellis soils are as follows—

Surface soil:
0 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—

Surface soil:
0 to 2 inches, very dark gray silt loam

Subsoil:
2 to 9 inches, strong brown loam
9 to 18 inches, brown gravelly loam

Limestone bedrock:
18 inches

Included with these soils in mapping are small areas of Amenia and Massena soils. Amenia and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are some areas of shallow soils that are well drained and areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Galway
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Nellis
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and moderate to moderately slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral to moderately alkaline below

Farmington
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Strongly acid to neutral in the surface soil and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are used for hay and pasture or cultivated crops. Some areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Rock outcrops may interfere with tillage and planting operations.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Rock outcrops may interfere with haying operations.

The potential productivity for sugar maple on this map unit is moderate. The woodland management concerns are seedling mortality and windthrow. Areas of Nellis soils have few management concerns. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. In areas of Farmington and Galway soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock is the main limitation. Areas of Nellis soils have few limitations. Bedrock has to be removed where deep excavations are necessary.

This map unit is unsuited for septic tank absorption fields in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock is the main limitation and in areas of Nellis soils, moderately slow permeability of the substratum is the main limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock or substratum.

This map unit is in land capability subclass 2e.

40C—Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky

This map unit consists of strongly sloping soils on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface. This map unit consists of 40 percent moderately deep, well drained Galway soils; 30 percent very deep, well drained Nellis soils; 14 percent shallow, somewhat excessively drained Farmington soils; and 16 percent other soils and areas of rock outcrop. The Galway, Nellis, and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Surface soil:
0 to 2 inches, very dark grayish brown silt loam

Subsoil:
2 to 9 inches, reddish brown loam
9 to 19 inches, yellowish red silt loam
19 to 30 inches, reddish brown very gravelly silt loam

Limestone bedrock:
30 inches

The typical sequence, depth, and composition of the layers of the Nellis soils are as follows—

Surface soil:
0 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—
Surface soil:
0 to 2 inches, very dark gray silt loam

Subsoil:
2 to 9 inches, strong brown loam
9 to 18 inches, brown gravelly loam

Limestone bedrock:
18 inches

Included with these soils in mapping are small areas of Amenia and Massena soils. Amenia and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are some areas of shallow soils that are well drained and areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Galway
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Nellis
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and moderate or moderately slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral to moderately alkaline below

Farmington
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate throughout the soil
Potential frost action: Moderate

Reaction: Strongly acid to neutral in the surface soil and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are used for hay and pasture or are in woodland. Some areas are used for cultivated crops.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Rock outcrops may interfere with tillage and planting operations.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Rock outcrops may interfere with haying operations.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are seedling mortality and windthrow. Areas of Nellis soils have few management concerns. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. In areas of Farmington and Galway soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations and in areas of Nellis soils slope is the main limitation. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations and in areas of Nellis soils, moderately slow permeability of the substratum and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock or substratum.

This map unit is in land capability subclass 3e.

40D—Galway-Nellis-Farmington complex, 15 to 25 percent slopes, rocky

This map unit consists of moderately steep soils on backslopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent moderately deep, well drained Galway soils; 30 percent very deep, well drained Nellis soils; 14 percent shallow, somewhat excessively drained Farmington soils; and 16 percent other soils and areas of rock outcrop. The Galway, Nellis, and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Organic layer:

0 to 1 inch, slightly decomposed leaves and twigs

1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, very dark grayish brown silt loam

Subsoil:
4 to 11 inches, reddish brown loam
11 to 21 inches, yellowish red silt loam
21 to 32 inches, reddish brown very gravelly silt loam

Limestone bedrock:
32 inches

The typical sequence, depth, and composition of the layers of the Nellis soils are as follows—
Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 10 inches, dark brown silt loam

Subsoil:
10 to 25 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
25 to 33 inches, light olive brown gravelly fine sandy loam
33 to 65 inches, olive very gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—
Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 5 inches, very dark gray silt loam

Subsoil:
5 to 12 inches, strong brown loam
12 to 21 inches, brown gravelly loam

Limestone bedrock:
21 inches

Included with these soils in mapping are small areas of Amenia and Massena soils. Amenia and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are some areas of shallow soils that are well drained and areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Galway
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate in the surface soil and subsoil
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Nellis

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in organic layer, moderate in the surface soil and subsoil, and moderate to moderately slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral to moderately alkaline below

Farmington

Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil, and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are in woodland. A few small areas are used for hay or pasture.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion. Rock outcrops may interfere with tillage and planting operations.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Rock outcrops may interfere with haying operations.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. In areas of Farmington and Galway soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations and in areas of Nellis soils slope is the main limitation. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Farmington soils and in areas with greater than 20 percent slope. In areas of Galway soils, depth to bedrock and slope are the main limitations and in areas of Nellis soils, moderately slow permeability of the substratum and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock or substratum.

This map unit is in land capability subclass 4e.

41C—Galway-Farmington complex, 8 to 15 percent slopes, very rocky

This map unit consists of strongly sloping soils on the summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent moderately deep, well drained Galway soils; 35 percent shallow, somewhat excessively drained Farmington soils; and 20 percent other soils and areas of rock outcrop. The Galway and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, very dark grayish brown silt loam

Subsoil:
4 to 11 inches, reddish brown loam
11 to 21 inches, yellowish red silt loam
21 to 32 inches, reddish brown very gravelly silt loam

Limestone bedrock:
32 inches

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 5 inches, very dark gray silt loam

Subsoil:
5 to 12 inches, strong brown loam
12 to 21 inches, brown gravelly loam

Limestone bedrock:
21 inches

Included with these soils in mapping are small areas of Amenia, Massena, and Nellis soils. Amenia and Massena soils are in depressions and drainageways and the Nellis soils are in deeper areas between rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are some areas of shallow soils that are well drained.

Important Soil Properties

Galway

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Farmington

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil, and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for sugar maple on this map unit is moderately low. The woodland management concerns are seedling mortality and windthrow. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

41D—Galway-Farmington complex, 15 to 25 percent slopes, very rocky

This map unit consists of moderately steep soils on the summits, shoulders, and backslopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent moderately deep, well drained Galway soils; 35 percent shallow, somewhat excessively drained Farmington soils; and 20 percent other soils and areas of rock outcrop. The Galway and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, very dark grayish brown silt loam

Subsoil:
4 to 11 inches, reddish brown loam
11 to 21 inches, yellowish red silt loam
21 to 32 inches, reddish brown very gravelly silt loam

Limestone bedrock:
32 inches

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 5 inches, very dark gray silt loam

Subsoil:
5 to 12 inches, strong brown loam
12 to 21 inches, brown gravelly loam

Limestone bedrock:
21 inches

Included with these soils in mapping are small areas of Amenia, Massena, and Nellis soils. Amenia and Massena soils are in depressions and drainageways and the Nellis soils are in deeper areas between rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are some areas of shallow soils that are well drained.

Important Soil Properties

Galway
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Farmington

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil, and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Farmington soils. In areas of Galway soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of shallow Farmington soils and in areas with greater than 20 percent slope. In areas of Galway soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

41E—Galway-Farmington complex, 25 to 50 percent slopes, very rocky

This map unit consists of steep soils on backslopes of hills. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent moderately deep, well drained Galway soils; 35 percent shallow, somewhat excessively drained Farmington soils; and 20 percent other soils and areas of rock outcrop. The Galway and Farmington soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Galway soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, very dark grayish brown silt loam

Subsoil:
4 to 11 inches, reddish brown loam
11 to 21 inches, yellowish red silt loam
21 to 32 inches, reddish brown very gravelly silt loam

Limestone bedrock:
32 inches

The typical sequence, depth, and composition of the layers of the Farmington soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 5 inches, very dark gray silt loam

Subsoil:
5 to 12 inches, strong brown loam
12 to 21 inches, brown gravelly loam

Limestone bedrock:
21 inches

Included with these soils in mapping are small areas of Amenia and Nellis soils. Amenia and Nellis soils are in deeper areas between rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, backslopes, and escarpments and cover about 5 percent of this map unit. Also included are some areas with less than 2 percent rock outcrop.

Also included are some areas of shallow soils that are well drained.

Important Soil Properties

Galway

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6.0 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and slightly alkaline or moderately alkaline in the substratum, where present

Farmington

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below

Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil, and moderately acid to slightly alkaline in the subsoil

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface, and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Farmington soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

42C—Macomber-Taconic complex, 8 to 15 percent slopes, rocky

This map unit consists of strongly sloping soils on the summits, shoulders, and backslopes of hills and ridges. Stones cover less that 0.1 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Macomber soils; 34 percent shallow, somewhat excessively drained Taconic soils; and 16 percent other soils and areas of rock outcrop. The Macomber and Taconic soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—
Surface soil:
0 to 2 inches, black channery silt loam

Subsoil:
2 to 6 inches, brown channery silt loam
6 to 12 inches, dark yellowish brown very channery silt loam
12 to 30 inches, light olive brown very channery silt loam

Substratum:
30 to 36 inches, olive brown very channery silt loam

Slate bedrock:
36 inches

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—
Surface soil:
0 to 2 inches, very dark grayish brown channery silt loam

Subsoil:
2 to 8 inches, strong brown very channery silt loam
8 to 12 inches, yellowish brown very channery silt loam

Slate bedrock:
12 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit, the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils, Pittstown soils are in depressions and drainageways, and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with a reddish subsoil, soils with black or very dark gray colors throughout the profile, and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Macomber
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid throughout the soil

Taconic
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid throughout the soil

Most areas of this map unit are used for hay and pasture. Some areas are used for cultivated crops or are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Rock outcrops may interfere with tillage and planting operations.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Rock outcrops may interfere with haying operations.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are seedling mortality and windthrow. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 3e.

42D—Macomber-Taconic complex, 15 to 25 percent slopes, rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover less than 0.1 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Macomber soils; 34 percent shallow, somewhat excessively drained Taconic soils; and 16 percent other soils and areas of rock outcrop. The Macomber and Taconic soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs

Surface soil:
1 to 3 inches, black channery silt loam

Subsoil:
3 to 7 inches, brown channery silt loam
7 to 13 inches, dark yellowish brown very channery silt loam
13 to 31 inches, light olive brown very channery silt loam

Substratum:
31 to 37 inches, olive brown very channery silt loam

Slate bedrock:
37 inches

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit, the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils, Pittstown soils are in depressions and drainageways, and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with a reddish subsoil, soils with black or very dark gray colors throughout the profile, and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Macomber

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Taconic

Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Taconic soils and in areas with greater than 20 percent slope. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

42E—Macomber-Taconic complex, 25 to 60 percent slopes, rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Macomber soils; 34 percent shallow, somewhat excessively drained Taconic soils; and 16 percent other soils and areas of rock outcrop. The Macomber and Taconic soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs

Surface soil:
1 to 3 inches, black channery silt loam

Subsoil:
3 to 7 inches, brown channery silt loam
7 to 13 inches, dark yellowish brown very channery silt loam
13 to 31 inches, light olive brown very channery silt loam

Substratum:
31 to 37 inches, olive brown very channery silt loam

Slate bedrock:
37 inches

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit, the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils, Pittstown soils are in depressions and drainageways, and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with a reddish subsoil, soils with black or very dark gray colors throughout the profile and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Macomber
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Taconic
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface, and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

43C—Taconic-Macomber complex, 8 to 15 percent slopes, very rocky

This map unit consists of strongly sloping soils on summits, shoulders, and backslopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent shallow, somewhat excessively drained Taconic soils; 35 percent moderately deep, well drained Macomber soils; and 20 percent other soils and areas of rock outcrop. The Taconic and Macomber soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows:

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs

Surface soil:
1 to 3 inches, black channery silt loam

Subsoil:
3 to 7 inches, brown channery silt loam
7 to 13 inches, dark yellowish brown very channery silt loam
13 to 31 inches, light olive brown very channery silt loam

Substratum:
31 to 37 inches, olive brown very channery silt loam

Slate bedrock:
37 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit, the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils, Pittstown soils are in depressions and drainageways, and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with a reddish subsoil and soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Taconic

Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Macomber

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are seedling mortality and windthrow. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

43D—Taconic-Macomber complex, 15 to 25 percent slopes, very rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent shallow, somewhat excessively drained Taconic soils; 35 percent moderately deep, well drained Macomber soils; and 20 percent other soils and areas of rock outcrop. The Taconic and Macomber soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs

Surface soil:
1 to 3 inches, black channery silt loam

Subsoil:
3 to 7 inches, brown channery silt loam
7 to 13 inches, dark yellowish brown very channery silt loam
13 to 31 inches, light olive brown very channery silt loam

Substratum:
31 to 37 inches, olive brown very channery silt loam

Slate bedrock:
37 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit, the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils, Pittstown soils are in depressions and drainageways, and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with a reddish subsoil and soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Taconic

Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Macomber

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Taconic soils. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Taconic soils and in areas with greater than 20 percent slope. In areas of Macomber soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

43E—Taconic-Macomber complex, 25 to 60 percent slopes, very rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 45 percent shallow, somewhat excessively drained Taconic soils; 35 percent moderately deep, well drained Macomber soils; and 20 percent other soils and areas of rock outcrop. The Taconic and Macomber soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Taconic soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 3 inches, very dark grayish brown channery silt loam

Subsoil:
3 to 9 inches, strong brown very channery silt loam
9 to 13 inches, yellowish brown very channery silt loam

Slate bedrock:
13 inches

The typical sequence, depth, and composition of the layers of the Macomber soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs

Surface soil:
1 to 3 inches, black channery silt loam

Subsoil:
3 to 7 inches, brown channery silt loam
7 to 13 inches, dark yellowish brown very channery silt loam
13 to 31 inches, light olive brown very channery silt loam

Substratum:
31 to 37 inches, olive brown very channery silt loam

Slate bedrock:
37 inches

Included with these soils in mapping are small areas of Dutchess, Hubbardton, and Pittstown soils and well drained shallow and moderately deep soils with less than 35 percent rock fragments in the subsoil and substratum. Dutchess soils are throughout the map unit; the shallow and moderately deep soils are in positions similar to the Taconic and Macomber soils; Pittstown soils are in depressions and drainageways; and Hubbardton soils are on convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with a reddish subsoil, soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Taconic
Available water capacity: Very low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Macomber
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Taconic soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

44B—Dutchess channery loam, 3 to 8 percent slopes

This soil is very deep, well drained, and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown channery loam

Subsoil:
5 to 14 inches, light olive brown and olive brown channery loam
14 to 26 inches, dark grayish brown channery loam

Substratum:
26 to 70 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic Soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile. Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid in the surface soil and subsoil and strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings and septic tank absorption fields.

This map unit is in land capability subclass 2e.

44C—Dutchess channery loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown channery loam

Subsoil:
5 to 14 inches, light olive brown and olive brown channery loam
14 to 26 inches, dark grayish brown channery loam

Substratum:
26 to 70 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic Soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile. Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid in the surface soil and subsoil and strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for hay and pasture. Some areas are used for cultivated crops and a few small areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields.

Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 3e.

44D—Dutchess channery loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on backslopes of hills and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown channery loam

Subsoil:
5 to 14 inches, light olive brown and olive brown channery loam
14 to 26 inches, dark grayish brown channery loam

Substratum:
26 to 70 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile. Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid in the surface soil and subsoil and strongly acid to slightly acid in the substratum

Most areas of this map unit are used for hay and pasture. A few small areas are in woodland or used for cultivated crops.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 4e.

47C—Dutchess channery loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 7 inches, dark brown channery loam

Subsoil:
7 to 16 inches, light olive brown and olive brown channery loam
16 to 28 inches, dark grayish brown channery loam

Substratum:
28 to 72 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic Soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

47D—Dutchess channery loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on backslopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 7 inches, dark brown channery loam

Subsoil:
7 to 16 inches, light olive brown and olive brown channery loam
16 to 28 inches, dark grayish brown channery loam

Substratum:
28 to 72 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic Soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

47E—Dutchess channery loam, 25 to 60 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 7 inches, dark brown channery loam

Subsoil:
7 to 16 inches, light olive brown and olive brown channery loam
16 to 28 inches, dark grayish brown channery loam

Substratum:
28 to 72 inches, dark grayish brown and very dark grayish brown channery loam

Included with this soil in mapping are small areas of Brayton, Macomber, Pittstown, and Taconic Soils. Brayton and Pittstown soils are in depressions and drainageways and Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with black or very dark gray colors throughout the profile.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

48B—Pittstown loam, 3 to 8 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark grayish brown loam

Subsoil:
6 to 18 inches, yellowish brown and olive brown loam
18 to 23 inches, mottled, olive gravelly silt loam

Substratum:
23 to 65 inches, mottled, firm olive gray gravelly silt loam

Included with this soil in mapping are small areas of Brayton, Dutchess, Macomber, and Taconic soils. Brayton soils are in depressions and drainageways. Dutchess, Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 30 inches
Depth to water table: Perched at 1.3 to 2.0 feet below the surface from November to April
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture and a few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concern is windthrow. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and the moderately slow or slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2e.

48C—Pittstown loam, 8 to 15 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark grayish brown loam

Subsoil:
6 to 18 inches, yellowish brown and olive brown loam
18 to 23 inches, mottled, olive gravelly silt loam

Substratum:
23 to 65 inches, mottled, firm olive gray gravelly silt loam

Included with this soil in mapping are small areas of Brayton, Dutchess, Macomber, and Taconic soils. Brayton soils are in depressions and drainageways. Dutchess, Macomber, and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 30 inches
Depth to water table: Perched at 1.3 to 2.0 feet below the surface from November to April
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture and a few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concern is windthrow. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 3e.

48D—Pittstown loam, 15 to 25 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and moderately steep. It is on backslopes of hills and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark grayish brown loam

Subsoil:
6 to 18 inches, yellowish brown and olive brown loam
18 to 23 inches, mottled, olive gravelly silt loam

Substratum:
23 to 65 inches, mottled, firm olive gray gravelly silt loam

Included with this soil in mapping are small areas of Brayton, Dutchess, Macomber, and Taconic soils. Brayton soils are in depressions and drainageways. Dutchess, Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 30 inches
Depth to water table: Perched at 1.3 to 2.0 feet below the surface from November to April
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Very strongly acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for hay and pasture. Some areas are used for cultivated crops and a few areas are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion, equipment limitations due to slope, and the seasonal high water table are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope and the seasonal high water table are management concerns. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Limiting access during wet periods and draining problem areas are common practices.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas of slopes of 20 percent or less, the seasonal high water table, slope, and slow permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 4e.

49C—Pittstown loam, 8 to 15 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 6 inches, dark grayish brown loam

Subsoil:
6 to 18 inches, yellowish brown and olive brown loam
18 to 23 inches, mottled, olive gravelly silt loam

Substratum:
23 to 65 inches, mottled, firm olive gray gravelly silt loam

Included with this soil in mapping are small areas of Brayton, Dutchess, Macomber, and Taconic soils. Brayton soils are in depressions and drainageways. Dutchess, Macomber and Taconic soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 30 inches
Depth to water table: Perched at 1.3 to 2.0 feet below the surface from November to April
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concern is windthrow. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

49D—Pittstown loam, 15 to 25 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and moderately steep. It is on backslopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 6 inches, dark grayish brown loam

Subsoil:
6 to 18 inches, yellowish brown and olive brown loam
18 to 23 inches, mottled, olive gravelly silt loam

Substratum:
23 to 65 inches, mottled, firm olive gray gravelly silt loam

Included with this soil in mapping are small areas of Brayton, Dutchess, Macomber, and Taconic soils. Brayton soils are in depressions and drainageways. Dutchess, Macomber and Taconic soils are on slightly higher convex areas. These soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 30 inches
Depth to water table: Perched at 1.3 to 2.0 feet below the surface from November to April
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and very strongly acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas with slopes greater than 20 percent. In areas with slopes 20 percent or less, the seasonal high water table, slope, and slow permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is

needed to raise the field the required distance above the seasonal high water table and the substratum.
This map unit is in land capability subclass 6s.

50B—Brayton loam, 0 to 5 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is poorly drained and nearly level or gently sloping. It is in depressions and drainageways and on toe slopes and foot slopes of hills and ridges. Stones cover less that 0.1 percent of the surface.
The typical sequence, depth, and composition of the layers of this soil are as follows—
Surface soil:
0 to 6 inches, very dark grayish brown loam

Subsoil:
6 to 8 inches, olive silt loam
8 to 15 inches, mottled, olive gray silt loam

Substratum:
15 to 65 inches, mottled, very firm, dark gray silt loam

Included with this soil in mapping are small areas of Dutchess, Macomber, Mansfield, and Pittstown soils. Dutchess, Pittstown, and Macomber soils are near the edges of the map unit and on slightly higher convex areas. Mansfield soils are in positions similar to Brayton soils. Included soils make up about 15 percent of the map unit.
Also included are soils that are somewhat poorly drained and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 10 to 27 inches
Depth to water table: At 0 to 1.5 feet below the surface from October to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow or slow in the substratum
Potential frost action: High
Reaction: Extremely acid to moderately acid in the surface soil, strongly acid to slightly acid in the subsoil, and moderately acid to neutral in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.
This map unit is moderately suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination.
This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.
The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are equipment limitations, seedling mortality, and

windthrow. Operating logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table and firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils.

This map unit is in land capability subclass 3w.

51B—Brayton loam, 0 to 5 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is poorly drained and nearly level or gently sloping. It is in depressions and drainageways and on toe slopes and foot slopes of hills and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 8 inches, very dark grayish brown loam

Subsoil:
8 to 10 inches, olive silt loam
10 to 17 inches, mottled, olive gray silt loam

Substratum:
17 to 67 inches, mottled, very firm dark gray silt loam

Included with this soil in mapping are small areas of Dutchess, Macomber, Mansfield, and Pittstown soils. Dutchess, Pittstown, and Macomber soils are near the edges of the map unit and on slightly higher convex areas. Mansfield soils are in positions similar to Brayton soils. Included soils make up about 15 percent of the map unit.

Also included are soils that are somewhat poorly drained.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 10 to 27 inches
Depth to water table: At 0 to 1.5 feet below the surface from October to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil, strongly acid to slightly acid in the subsoil, and moderately acid to neutral in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of

stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table and firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils.

This map unit is in land capability subclass 7s.

52A—Mansfield mucky silt loam, 0 to 3 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is very poorly drained and nearly level. It is in depressions and drainageways on uplands. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inch, moderately decomposed leaves and twigs

Surface soil:
2 to 13 inches, very dark brown mucky silt loam

Subsoil:
13 to 22 inches, mottled, dark gray and gray gravelly loam

Substratum:
22 to 30 inches, mottled, very firm grayish brown channery loam
30 to 39 inches, very firm gray and light olive brown channery loam
39 to 67 inches, very firm olive gray and light olive brown channery silt loam

Included with this soil in mapping are small areas of Brayton, Macomber, and Pittstown soils. Brayton soils are in positions similar to Mansfield soils and Pittstown and Macomber soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 14 to 36 inches
Depth to water table: A seasonal high water table is perched above the substratum from 1.0 foot above the surface to a depth of 0.5 feet from late fall to late spring
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow and very slow in the substratum
Potential frost action: High

Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to slightly acid in the surface soil, and strongly acid to neutral in the subsoil and substratum

Most areas of this map unit are in woodland. A few areas are used for unimproved pasture.

This map unit is unsuited for most uses because of very poorly drained soils and the hazard of ponding.

This map unit is in land capability subclass 7s.

64B—Stockbridge loam, 2 to 8 percent slopes

This soil is very deep, well drained, and nearly level or gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, very dark grayish brown loam

Subsoil:
9 to 24 inches, dark yellowish brown and olive brown loam

Substratum:
24 to 65 inches, firm olive brown and olive gravelly loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, Nellis, and Pittsfield soils. Galway soils are on slightly higher convex areas and Georgia and Massena soils are in depressions and drainageways. Nellis and Pittsfield soils are in positions similar to Stockbridge soils. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow and slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil, subsoil, and substratum to a depth of 40 inches and moderately acid to moderately alkaline below 40 inches

Most areas of this map unit are cleared and used for cultivated crops and hay or are in urban use. Some areas are used for pasture and a few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings.

Permeability of the substratum is the main limitation if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 2e.

64C—Stockbridge loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, very dark grayish brown loam

Subsoil:
9 to 24 inches, dark yellowish brown and olive brown loam

Substratum:
24 to 65 inches, firm olive brown and olive gravelly loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, Nellis, and Pittsfield soils. Galway soils are on slightly higher convex areas and Georgia and Massena soils are in depressions and drainageways. Nellis and Pittsfield soils are in positions similar to Stockbridge soils. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow and slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil, subsoil and substratum to a depth of 40 inches and moderately acid to moderately alkaline below 40 inches

Most areas of this map unit are cleared and used for cultivated crops and hay or are in urban use. Some areas are used for pasture and a few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 3e.

64D—Stockbridge loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, very dark grayish brown loam

Subsoil:
9 to 24 inches, dark yellowish brown and olive brown loam

Substratum:
24 to 65 inches, firm olive brown and olive gravelly loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, Nellis, and Pittsfield soils. Galway soils are on slightly higher convex areas and Georgia and Massena soils are in depressions and drainageways. Nellis and Pittsfield soils are in positions similar to Stockbridge soils. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow and slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil, subsoil, and substratum to a depth of 40 inches and moderately acid to moderately alkaline below 40 inches

Most areas of this map unit are cleared and used for hay and pasture. A few areas are used for cultivated crops or are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion.

Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes greater than 20 percent. In areas with slopes of 20 percent or less, slope and the slow permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 4e.

65C—Stockbridge loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 9 inches, very dark grayish brown loam

Subsoil:
9 to 24 inches, dark yellowish brown and olive brown loam

Substratum:
24 to 65 inches, firm olive brown and olive gravelly loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, Nellis, and Pittsfield soils. Galway soils are on slightly higher convex areas and Georgia and Massena soils are in depressions and drainageways. Nellis and Pittsfield soils are in positions similar to Stockbridge soils. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow and slow in the substratum
Potential frost action: Moderate
Reaction: extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, subsoil, and substratum to a depth of 40 inches and moderately acid to moderately alkaline below 40 inches

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of

stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 6s.

65D—Stockbridge loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 9 inches, very dark grayish brown loam

Subsoil:
9 to 24 inches, dark yellowish brown and olive brown loam

Substratum:
24 to 65 inches, firm olive brown and olive gravelly loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, Nellis, and Pittsfield soils. Galway soils are on slightly higher convex areas and Georgia and Massena soils are in depressions and drainageways. Nellis and Pittsfield soils are in positions similar to Stockbridge soils. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow and slow in the substratum
Potential frost action: Moderate
Reaction: extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil, subsoil, and substratum to a depth of 40 inches and moderately acid to moderately alkaline below 40 inches

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes greater than 20 percent. In areas with slopes of 20 percent or less, slope and the slow permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 6s.

66A—Georgia loam, 0 to 3 percent slopes

This soil is very deep, moderately well drained, and nearly level. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate

Reaction: Strongly acid to neutral throughout the soil

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture or are in urban use. A few areas are in woodland.

This map unit is well suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and the slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2w.

66B—Georgia loam, 3 to 8 percent slopes

This soil is very deep, moderately well drained, and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum

Potential frost action: Moderate
Reaction: Strongly acid to neutral throughout the soil

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture or are in urban use. A few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and the slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2e.

66C—Georgia loam, 8 to 15 percent slopes

This soil is very deep, moderately well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches

Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Strongly acid to neutral throughout the soil

Most areas of this map unit are cleared and used for cultivated crops and hay. Some areas are used for pasture or are in urban use. A few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and the slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 3e.

66D—Georgia loam, 15 to 25 percent slopes

This soil is very deep, moderately well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Surface soil:
0 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Strongly acid to neutral throughout the soil

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion, equipment limitations due to slope, and the seasonal high water table are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope and the seasonal high water table are management concerns. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Limiting access during wet periods and draining problem areas are common practices.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas with slopes of 20 percent or less, the seasonal high water table, slope, and the slow permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 4e.

67B—Georgia loam, 3 to 8 percent slopes, very stony

This soil is very deep, moderately well drained, and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and strongly acid to neutral below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

67C—Georgia loam, 8 to 15 percent slopes, very stony

This soil is very deep, moderately well drained and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 10 inches, very dark grayish brown loam

Subsoil:
10 to 18 inches, yellowish brown silt loam
18 to 30 inches, mottled, olive brown and olive silt loam

Substratum:
30 to 65 inches, mottled, firm olive gravelly silt loam

Included with this soil in mapping are small areas of Galway, Massena, and Stockbridge soils. Galway and Stockbridge soils are on slightly higher convex areas and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are soils with carbonates above a depth of 40 inches.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.2 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and strongly acid to neutral below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and the slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is

needed to raise the field the required distance above the seasonal high water table and the substratum.
This map unit is in land capability subclass 6s.

68A—Massena silt loam, 0 to 3 percent slopes

This soil is very deep, somewhat poorly drained, and nearly level. It is in depressions and drainageways on uplands. Stones cover less that 0.1 percent of the surface.
The typical sequence, depth, and composition of the layers of this soil are as follows—
Surface soil:
0 to 8 inches, very dark gray silt loam

Subsoil:
8 to 11 inches, olive brown loam
11 to 24 inches, mottled, dark grayish brown and olive gray loam

Substratum:
24 to 36 inches, mottled, dark olive gray gravelly loam
36 to 65 inches, mottled, firm olive gray and olive gravelly loam

Included with this soil in mapping are small areas of Amenia, Georgia, and Massena soils. Amenia and Georgia soils are on slightly higher convex areas and Mansfield soils are in positions similar to Massena soils. Included soils make up about 15 percent of the map unit.
Also included are soils that are poorly drained and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.0 to 1.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and moderately slow to slow in the subsoil and substratum
Potential frost action: High
Reaction: Moderately acid to neutral in the surface soil and subsoil and neutral to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.
This map unit is moderately suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination.
This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.
The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock

or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited as a site for septic tank absorption fields because of somewhat poorly drained soils.

This map unit is in land capability subclass 3w.

68B—Massena silt loam, 3 to 8 percent slopes

This soil is very deep, somewhat poorly drained and gently sloping. It is in depressions and drainageways on uplands. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, very dark gray silt loam

Subsoil:
8 to 11 inches, olive brown loam
11 to 24 inches, mottled, dark grayish brown and olive gray loam

Substratum:
24 to 36 inches, mottled, dark olive gray gravelly loam
36 to 65 inches, mottled, firm olive gray and olive gravelly loam

Included with this soil in mapping are small areas of Amenia, Georgia, and Massena soils. Amenia and Georgia soils are on slightly higher convex areas and Mansfield soils are in positions similar to Massena soils. Included soils make up about 15 percent of the map unit.

Also included are soils that are poorly drained and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.0 to 1.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and moderately slow and slow in the subsoil and substratum
Potential frost action: High
Reaction: Moderately acid to neutral in the surface soil and subsoil and neutral to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is moderately suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited as a site for septic tank absorption fields because of somewhat poorly drained soils.

This map unit is in land capability subclass 3w.

69A—Massena silt loam, 0 to 3 percent slopes, very stony

This soil is very deep, somewhat poorly drained and nearly level. It is in depressions and drainageways on uplands. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 10 inches, very dark gray silt loam

Subsoil:
10 to 13 inches, olive brown loam
13 to 26 inches, mottled, dark grayish brown and olive gray loam

Substratum:
26 to 38 inches, mottled, dark olive gray gravelly loam
38 to 67 inches, mottled, firm olive gray and olive gravelly loam

Included with this soil in mapping are small areas of Amenia, Georgia, and Massena soils. Amenia and Georgia soils are on slightly higher convex areas and Mansfield soils are in positions similar to Massena soils. Included soils make up about 15 percent of the map unit.

Also included are soils that are poorly drained.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.0 to 1.5 feet below the surface from November to May
Hydrologic group: C

Permeability: Moderately rapid in the organic layer, moderate in the surface soil, and moderately slow and slow in the subsoil and substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited as a site for septic tank absorption fields because of somewhat poorly drained soils.

This map unit is in land capability subclass 5s.

69B—Massena silt loam, 3 to 8 percent slopes, very stony

This soil is very deep, somewhat poorly drained and gently sloping. It is in depressions and drainageways on uplands. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 10 inches, very dark gray silt loam

Subsoil:
10 to 13 inches, olive brown loam
13 to 26 inches, mottled, dark grayish brown and olive gray loam

Substratum:
26 to 38 inches, mottled, dark olive gray gravelly loam
38 to 67 inches, mottled, firm olive gray and olive gravelly loam

Included with this soil in mapping are small areas of Amenia, Georgia, and Massena soils. Amenia and Georgia soils are on slightly higher convex areas and Mansfield soils are in positions similar to Massena soils. Included soils make up about 15 percent of the map unit.

Also included are soils that are poorly drained.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.0 to 1.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil, and moderately slow and slow in the subsoil and substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited as a site for septic tank absorption fields because of somewhat poorly drained soils.

This map unit is in land capability subclass 6s.

70A—Groton gravelly fine sandy loam, 0 to 3 percent slopes

This soil is very deep, excessively drained, and nearly level. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown gravelly fine sandy loam

Subsoil:
8 to 14 inches, brown gravelly fine sandy loam
14 to 22 inches, dark yellowish brown very gravelly sandy loam

Substratum:
22 to 65 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Copake, Fredon, Hero, and Windsor soils. Copake and Windsor soils are throughout the map unit and Fredon and Hero soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid and rapid in the surface soil and upper subsoil and very rapid in the lower subsoil and substratum
Potential frost action: Low
Reaction: Moderately acid to neutral in the surface soil and upper part of the subsoil, moderately acid to slightly alkaline in the lower part of the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. In some areas, there are excavations where sand and gravel have been removed.

This map unit is moderately suited to cultivated crops. The droughtiness and low natural fertility of the soil are the management concerns. Including grasses and legumes in the crop rotation, using conservation tillage that leaves crop residue on the surface, and applying additional organic matter, such as manure, help to improve the water holding capacity and fertility of the soil. Irrigation should be considered for high value truck crops.

This map unit is moderately suited to hay and pasture. The droughtiness of the soil is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is high. The woodland management concern is seedling mortality. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 3s.

70B—Groton gravelly fine sandy loam, 3 to 8 percent slopes

This soil is very deep, excessively drained and gently sloping. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown gravelly fine sandy loam

Subsoil:
8 to 14 inches, brown gravelly fine sandy loam
14 to 22 inches, dark yellowish brown very gravelly sandy loam

Substratum:
22 to 65 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Copake, Fredon, Hero, and Windsor soils. Copake and Windsor soils are throughout the map unit and Fredon and Hero soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid and rapid in the surface soil and upper subsoil and very rapid in the lower subsoil and substratum
Potential frost action: Low
Reaction: Moderately acid to neutral in the surface soil and upper part of the subsoil, moderately acid to slightly alkaline in the lower part of the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. In some areas, there are excavations where sand and gravel have been removed.

This map unit is moderately suited to cultivated crops. The droughtiness and low natural fertility of the soil are the management concerns. Including grasses and legumes in the crop rotation, using conservation tillage that leaves crop residue on the surface, and applying additional organic matter, such as manure, help to improve the water holding capacity and fertility of the soil. Irrigation should be considered for high value truck crops.

This map unit is moderately suited to hay and pasture. The droughtiness of the soil is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is high. The woodland management concern is seedling mortality. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 3s.

70C—Groton gravelly fine sandy loam, 8 to 15 percent slopes

This soil is very deep, excessively drained, and strongly sloping. It is on stream terraces dissected by drainageways.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown gravelly fine sandy loam

Subsoil:
8 to 14 inches, brown gravelly fine sandy loam
14 to 22 inches, dark yellowish brown very gravelly sandy loam

Substratum:
22 to 65 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Copake, Fredon, Hero, and Windsor soils. Copake and Windsor soils are throughout the map unit and Fredon and Hero soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid and rapid in the surface soil and upper subsoil and very rapid in the lower subsoil and substratum
Potential frost action: Low
Reaction: Moderately acid to neutral in the surface soil and upper part of the subsoil, moderately acid to slightly alkaline in the lower part of the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops, hay, and pasture or are in urban use. Some areas are in woodland. In some areas, there are excavations where sand and gravel have been removed.

This map unit is moderately suited to cultivated crops. The droughtiness and low natural fertility of the soil and the hazard of erosion are the management concerns. Including grasses and legumes in the crop rotation, using conservation tillage that leaves crop residue on the surface, and applying additional organic matter, such as manure, help to improve the water holding capacity and fertility of the soil and help to control erosion. Irrigation should be considered for high value truck crops.

This map unit is moderately suited to hay and pasture. The droughtiness of the soil is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is high. The woodland management concern is seedling mortality. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope and the poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. Special slope design of septic tank absorption fields is needed in some places for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 4s.

70D—Groton gravelly fine sandy loam, 15 to 25 percent slopes

This soil is very deep, excessively drained, and moderately steep. It is on stream terraces dissected by drainageways.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown gravelly fine sandy loam

Subsoil:
8 to 14 inches, brown gravelly fine sandy loam
14 to 22 inches, dark yellowish brown very gravelly sandy loam

Substratum:
22 to 65 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Copake, Fredon, Hero, and Windsor soils. Copake and Windsor soils are throughout the map unit and Fredon and Hero soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid and rapid in the surface soil and upper subsoil and very rapid in the lower subsoil and substratum
Potential frost action: Low
Reaction: Moderately acid to neutral in the surface soil and upper part of the subsoil, moderately acid to slightly alkaline in the lower part of the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are in woodland. Some areas are cleared and used for pasture. In some areas, there are excavations where sand and gravel have been removed.

This map unit is poorly suited to cultivated crops. The hazard of erosion, equipment limitations due to slope, droughtiness, and low natural fertility of the soil are the management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion and improve the water holding capacity and fertility of the soil.

This map unit is moderately suited to hay and pasture. The main concerns are the droughtiness of the soil and equipment limitations due to slope. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and seedling mortality. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope and the poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 6s.

70E—Groton gravelly fine sandy loam, 25 to 60 percent slopes.

This soil is very deep, excessively drained, and steep. It is on stream terrace escarpments.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown gravelly fine sandy loam

Subsoil:
8 to 14 inches, brown gravelly fine sandy loam
14 to 22 inches, dark yellowish brown very gravelly sandy loam

Substratum:
22 to 65 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Copake, Fredon, Hero, and Windsor soils. Copake and Windsor soils are throughout the map unit and Fredon and Hero soils are in drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid and rapid in the surface soil and upper subsoil and very rapid in the lower subsoil and substratum
Potential frost action: Low
Reaction: Moderately acid to neutral in the surface soil and upper part of the subsoil, moderately acid to slightly alkaline in the lower part of the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture. In some areas, there are excavations where sand and gravel have been removed.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes.

The potential productivity for growing eastern white pine on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and seedling mortality. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

71A—Hero gravelly fine sandy loam, 0 to 3 percent slopes

This soil is very deep, moderately well drained, and nearly level. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 19 inches, yellowish brown and olive brown gravelly fine sandy loam
19 to 24 inches, mottled, olive gravelly silt loam

Substratum:
24 to 65 inches, mottled, olive gray very gravelly sand

Included with this soil in mapping are small areas of Copake, Fredon, and Groton soils. Copake and Groton soils are on slightly higher convex areas and Fredon soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches, soils with sandy textures above a depth of 18 inches, and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.5 to 2.5 feet below the surface from November to April
Hydrologic group: B
Permeability: Moderate and moderately rapid in the surface soil and subsoil and rapid in the substratum
Potential frost action: High
Reaction: Moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops or pasture. Some areas are used for hay.

This map unit is well suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is very high. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Cutbanks of excavations are subject to caving or sloughing.

The seasonal high water table is the main limitation if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table. The poor filtering capacity of the soil is also a limitation for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 2w.

71B—Hero gravelly fine sandy loam, 3 to 8 percent slopes

This soil is very deep, moderately well drained, and gently sloping. It is on stream terraces.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 19 inches, yellowish brown and olive brown gravelly fine sandy loam
19 to 24 inches, mottled, olive gravelly silt loam

Substratum:
24 to 65 inches, mottled, olive gray very gravelly sand

Included with this soil in mapping are small areas of Copake, Fredon, and Groton soils. Copake and Groton soils are on slightly higher convex areas and Fredon soils are in depressions and drainageways. Included soils make up about 20 percent of the map unit.

Also included are soils with carbonates below a depth of 40 inches, soils with sandy textures above a depth of 18 inches, and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: At 1.5 to 2.5 feet below the surface from November to April
Hydrologic group: B
Permeability: Moderate and moderately rapid in the surface soil and subsoil and rapid in the substratum
Potential frost action: High
Reaction: Moderately acid to neutral in the surface soil, moderately acid to slightly alkaline in the subsoil, and neutral and moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops or pasture. Some areas are used for hay.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing eastern white pine on this map unit is very high. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Cutbanks of excavations are subject to caving or sloughing.

The seasonal high water table is the main limitation if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table. The poor filtering capacity of the soil is also a limitation for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 2e.

72A—Fredon fine sandy loam, 0 to 3 percent slopes

This soil is very deep, somewhat poorly drained, and nearly level. It is in depressions and drainageways on low stream terraces. This map unit may flood during unusual weather conditions.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 9 inches, dark grayish brown fine sandy loam

Subsoil:
9 to 11 inches, mottled, olive brown silt loam
11 to 23 inches, mottled olive gray silt loam

Substratum:
23 to 65 inches, mottled, dark gray gravelly loamy sand, very gravelly coarse sand

Included with this soil in mapping are small areas of Adrian, Hero, Pootatuck, Raynham, and Saco soils. Adrian and Raynham soils are in positions similar to Fredon soils; Hero soils are on slightly higher convex areas; and Pootatuck and Saco soils are on flood plains. Included soils make up about 15 percent of the map unit.

Also included are soils that are poorly drained and soils that have sandy or gravelly textures above a depth of 22 inches.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to water table: At 0.5 to 1.5 feet below the surface from October to June
Hydrologic group: C
Permeability: Moderate and moderately slow in the surface soil and subsoil and rapid in the substratum
Potential frost action: High
Reaction: Moderately acid to neutral in the surface soil and subsoil and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops or pasture. Some areas are used for hay and some are in woodland.

This map unit is moderately suited to cultivated crops. The seasonal high water table is a management concern. Spring tillage and harvesting operations may be delayed because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and the hazard of flooding limit this map unit as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. The map unit is unsuitable as a site for dwellings in areas that are subject to flooding.

This map unit is unsuited as a site for septic tank absorption fields because of the somewhat poorly drained soils.

This map unit is a probable source of sand and gravel for use as a construction material. The high water table is a major limitation to excavation. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 3w.

84B—Nellis silt loam, 3 to 8 percent slopes

This soil is very deep, well drained, and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils; Amenia and Massena soils are in depressions and drainageways; and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and moderate and moderately slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are cleared and used for cultivated crops and hay or are in urban use. Some areas are used for pasture and a few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings.

The permeability of the substratum is the main limitation if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 2e.

84C—Nellis silt loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and moderate and moderately slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are cleared and used for cultivated crops and hay or are in urban use. Some areas are used for pasture and a few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope and the permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 3e.

84D—Nellis silt loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and moderate and moderately slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay or cultivated crops or are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas with slopes of 20 percent or less, slope and permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 4e.

85B—Nellis silt loam, 3 to 8 percent slopes, very stony

This soil is very deep, well drained, and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs
Surface soil:
1 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderate and moderately slow in the substratum
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings.

The permeability of the substratum is the main limitation if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 6s.

85C—Nellis silt loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderate and moderately slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 6s.

85D—Nellis silt loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderate and moderately slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes greater than 20 percent. In areas with slopes of 20 percent or less, slope and permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the substratum.

This map unit is in land capability subclass 6s.

85E—Nellis silt loam, 25 to 50 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 8 inches, dark brown silt loam

Subsoil:
8 to 23 inches, brown and dark yellowish brown gravelly silt loam

Substratum:
23 to 31 inches, light olive brown gravelly fine sandy loam
31 to 65 inches, olive very gravelly fine sandy loam

Included with this soil in mapping are small areas of Amenia, Galway, Massena, and Stockbridge soils. Stockbridge soils are in positions similar to Nellis soils, Amenia and Massena soils are in depressions and drainageways, and Galway soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderate and moderately slow in the substratum
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to neutral in the surface soil and subsoil, moderately acid to slightly alkaline in the upper part of the substratum, and neutral and moderately alkaline in the lower part of the substratum

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

86A—Amenia silt loam, 0 to 3 percent slopes

This soil is very deep, moderately well drained, and nearly level. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown silt loam

Subsoil:
5 to 14 inches, dark yellowish brown silt loam
14 to 23 inches, mottled, olive brown silt loam

Substratum:
23 to 65 inches, mottled, firm, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, and Nellis soils. Galway and Nellis soils are on slightly higher convex areas, Georgia soils are in positions similar to the Amenia soils, and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to slightly alkaline in the surface soil and subsoil and slightly alkaline to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture.

This map unit is well suited to cultivated crops. The management concern is the seasonal high water table. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and slow permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2w.

86B—Amenia silt loam, 3 to 8 percent slopes—

This soil is very deep, moderately well drained and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown silt loam

Subsoil:
5 to 14 inches, dark yellowish brown silt loam
14 to 23 inches, mottled, olive brown silt loam

Substratum:
23 to 65 inches, mottled, firm, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, and Nellis soils. Galway and Nellis soils are on slightly higher convex areas, Georgia soils are in positions similar to the Amenia soils, and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate
Reaction: Moderately acid to slightly alkaline in the surface soil and subsoil and slightly alkaline to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture. A few areas are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2e

86C—Amenia silt loam, 8 to 15 percent slopes

This soil is very deep, moderately well drained and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 5 inches, dark brown silt loam

Subsoil:
5 to 14 inches, dark yellowish brown silt loam
14 to 23 inches, mottled, olive brown silt loam

Substratum:
23 to 65 inches, mottled, firm, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, and Nellis soils. Galway and Nellis soils are on slightly higher convex areas, Georgia soils are in positions similar to the Amenia soils, and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: B
Permeability: Moderate in the surface soil and subsoil and slow in the substratum
Potential frost action: Moderate

Reaction: Moderately acid to slightly alkaline in the surface soil and subsoil and slightly alkaline or moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture. A few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods, and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. This map unit has few woodland management concerns.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 3e.

87B—Amenia silt loam, 3 to 8 percent slopes, very stony

This soil is very deep, moderately well drained and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 7 inches, dark brown silt loam

Subsoil:
7 to 16 inches, dark yellowish brown silt loam
16 to 25 inches, mottled, olive brown silt loam

Substratum:
25 to 65 inches, mottled, firm, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, and Nellis soils. Galway and Nellis soils are on slightly higher convex areas, Georgia soils are in positions similar to the Amenia soils, and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to slightly alkaline in the surface soil and subsoil, and slightly alkaline or moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

87C—Amenia silt loam, 8 to 15 percent slopes, very stony

This soil is very deep, moderately well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 7 inches, dark brown silt loam

Subsoil:
7 to 16 inches, dark yellowish brown silt loam
16 to 25 inches, mottled, olive brown silt loam

Substratum:
25 to 65 inches, mottled, firm, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Massena, and Nellis soils. Galway and Nellis soils are on slightly higher convex areas, Georgia soils are in positions similar to the Amenia soils, and Massena soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, moderately acid to slightly alkaline in the surface soil and subsoil, and slightly alkaline or moderately alkaline in the substratum

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

90C—Berkshire fine sandy loam, 3 to 15 percent slopes, extremely stony

This soil is very deep, well drained and gently sloping or strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills and mountains. Stones cover 3 to 15 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Monadnock, Peru, and Tunbridge soils. Monadnock soils are throughout the map unit, Peru soils are in depressions and drainageways, and Tunbridge soils are on slightly higher convex areas. Included soils make up about 20 percent of the map unit.

Also included are soils with a olive brown subsoil, soils with a firm or very firm substratum, soils with greater than 35 percent rock fragments in the surface soil and subsoil, and soils with less than 3 percent stones or more than 3 percent boulders on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concern is equipment limitations. Stones and boulders on the surface may interfere with equipment operations.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Large stones and boulders may interfere with excavation and backfilling.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Large stones and boulders may interfere with excavation and backfilling.

This map unit is in land capability subclass 7s.

90E—Berkshire fine sandy loam, 15 to 50 percent slopes, extremely stony

This soil is very deep, well drained, and moderately steep or steep. It is on backslopes of hills and mountains. Stones cover 3 to 15 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Monadnock, Peru, and Tunbridge soils. Monadnock soils are throughout the map unit, Peru soils are in depressions and drainageways and Tunbridge soils are on slightly higher convex areas. Included soils make up about 20 percent of the map unit.

Also included are soils with a olive brown subsoil, soils with a firm or very firm substratum, soils with greater than 35 percent rock fragments in the surface soil and subsoil, and soils with less than 3 percent stones or more than 3 percent boulders on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Stones and boulders on the surface may interfere with equipment operations.

This map unit is unsuited for dwellings, in areas of steep slopes. In areas of moderately steep slopes, slope is the main limitation. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Large stones and boulders may interfere with excavation and backfilling.

This map unit is unsuited for septic tank absorption fields in areas of steep slopes. In areas of moderately steep slopes, slope is the main limitation. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 7s.

93B—Pittsfield fine sandy loam, 3 to 8 percent slopes

This soil is very deep, well drained, and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate to moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are in cleared and used for cultivated crops. Some areas are used for hay and pasture.

This map unit is well suited to cultivated crops (fig. 5). The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

This map unit has few limitations if used as a site for dwellings and septic tank absorption fields.

This map unit is in land capability subclass 2e.

93C—Pittsfield fine sandy loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Figure 5.—This area of Pittsfield fine sandy loam, 3 to 8 percent slopes, is well suited to cultivated crops and hay and pasture. It meets the USDA criteria for prime farmland.

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for cultivated crops. Some areas are used for hay and pasture.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 3e.

93D—Pittsfield fine sandy loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are cleared and used for hay and pasture. A few areas are used for cultivated crops or are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 4e.

94B—Pittsfield fine sandy loam, 3 to 8 percent slopes, very stony

This soil is very deep, well drained, and gently sloping. It is on summits and shoulders of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are used for woodland. Some areas are used for hay and pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings and septic tank absorption fields.

This map unit is in land capability subclass 6s.

94C—Pittsfield fine sandy loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of

stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

94D—Pittsfield fine sandy loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

94E—Pittsfield fine sandy loam, 25 to 50 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves and twigs

Surface soil:
1 to 7 inches, brown fine sandy loam

Subsoil:
7 to 15 inches, yellowish brown fine sandy loam
15 to 29 inches, dark grayish brown and brown fine sandy loam

Substratum:
29 to 40 inches, dark yellowish brown fine sandy loam
40 to 53 inches, light olive brown fine sandy loam
53 to 65 inches, light olive brown sandy loam

Included with this soil in mapping are small areas of Galway, Georgia, Macomber, Nellis, and Stockbridge soils. Galway and Macomber soils are on slightly higher convex areas, Nellis and Stockbridge soils are throughout the map unit, and Georgia soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer, very strongly acid to neutral in the surface soil, strongly acid to neutral in the subsoil, and moderately acid to moderately alkaline in the substratum

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

95C—Houghtonville fine sandy loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Mundal, and Rawsonville soils. Mundal soils are in depressions and drainageways, Berkshire soils are in positions similar to Houghtonville soils, and Rawsonville soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum, and small areas with more than 0.1 percent boulders on the surface.

Important Soil Properties

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

95D—Houghtonville fine sandy loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs,

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Mundal, and Rawsonville soils. Mundal soils are in depressions and drainageways, Berkshire soils are in positions similar to Houghtonville soils, and Rawsonville soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum, and small areas with more than 0.1 percent boulders on the surface.

Important Soil Properties

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate

Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

95E—Houghtonville fine sandy loam, 25 to 60 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs,

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Mundal, and Rawsonville soils. Mundal soils are in depressions and drainageways, Berkshire soils are in positions similar to Houghtonville soils, and Rawsonville soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum, and small areas with more than 0.1 percent boulders on the surface.

Important Soil Properties

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C

Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

96D—Hogback-Rawsonville-Rock outcrop complex, 15 to 25 percent slopes, very stony

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent shallow, well drained Hogback soils; 30 percent moderately deep, well drained Rawsonville soils; 10 percent rock outcrop; and 20 percent other soils. Hogback and Rawsonville soils and rock outcrops are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam

8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The areas of rock outcrop are exposures of schist bedrock on summits, shoulders, and backslopes.

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal and Tunbridge soils. Houghtonville and Mundal soils are in areas between rock outcrops, Lyman soils are in positions similar to Hogback soils, and Tunbridge soils are in positions similar to Rawsonville soils. Included soils make up about 20 percent of the map unit.

Also included are soils that have greater than 35 percent rock fragments in the subsoil and substratum.

Important Soil Properties

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Hogback soils. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Hogback soils and in areas with greater than 20 percent slope. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

96F—Hogback-Rawsonville-Rock outcrop complex, 25 to 70 percent slopes, very stony

This map unit consists of steep or very steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent shallow, well drained Hogback soils; 30 percent moderately deep, well drained Rawsonville soils; 10 percent rock outcrop; and 20 percent other soils. Hogback and Rawsonville soils and rock outcrops are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The areas of rock outcrop are exposures of schist bedrock on summits, shoulders, backslopes and escarpments.

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal and Tunbridge soils. Houghtonville and Mundal soils are in areas between rock outcrops, Lyman soils are in positions similar to Hogback soils, and Tunbridge soils are in positions similar to Rawsonville soils. Included soils make up about 20 percent of the map unit.

Also included are soils that have greater than 35 percent rock fragments in the subsoil and substratum.

Important Soil Properties

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface, and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help to minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep or very steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

100B—Wilmington fine sandy loam, 0 to 8 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is poorly drained and nearly level or gently sloping. It is in depressions on uplands. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inch moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 5 inches, black fine sandy loam
5 to 6 inches, dark gray fine sandy loam

Subsoil:
6 to 20 inches, mottled, black fine sandy loam
20 to 26 inches, mottled, dark brown fine sandy loam

Substratum:
26 to 67 inches, mottled, very firm olive gray gravelly fine sandy loam

Included with this soil in mapping are small areas of Adrian and Mundal soils. Adrian soils are in drainageways and Mundal soils are on slightly higher convex areas. These soils make up about 15 percent of the map unit.

Some areas are ponded for part of the year.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 24 inches
Depth to water table: At 0 to 1.5 feet below the surface from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table and firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils.

This map unit is in land capability subclass 6s.

102B—Mundal fine sandy loam, 3 to 8 percent slopes

This soil is moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and gently sloping. It is on footslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 3 inches, black fine sandy loam

Surface soil:
3 to 4 inches, brown fine sandy loam

Subsoil:
4 to 11 inches, dark brown fine sandy loam
11 to 23 inches, dark brown gravelly fine sandy loam

Substratum:
23 to 65 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Houghtonville, Peru, Rawsonville, and Wilmington soils. Houghtonville and Rawsonville soils are on slightly higher convex areas, Peru soils are in positions similar to the Mundal soils, and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to moderately acid in the surface soil and subsoil and strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. The woodland management concerns are equipment limitations and windthrow. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2e.

102C—Mundal fine sandy loam, 8 to 15 percent slopes

This soil is moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on ridges and backslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of the Mundal soil are as follows—

Surface soil:
0 to 3 inches, black fine sandy loam

Surface soil:
3 to 4 inches, brown fine sandy loam

Subsoil:
4 to 11 inches, dark brown fine sandy loam
11 to 23 inches, dark brown gravelly fine sandy loam

Substratum:
23 to 65 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Houghtonville, Peru, Rawsonville, and Wilmington soils. Houghtonville and Rawsonville soils are on slightly higher convex areas, Peru soils are in positions similar to the Mundal soils, and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to moderately acid in the surface soil and subsoil and strongly acid to slightly acid in the substratum

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods, and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is very high. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 3e.

104B—Colton gravelly loamy sand, 3 to 8 percent slopes, extremely stony

This soil is very deep, excessively drained and gently sloping. It is on stream terraces. Stones cover 3 to 15 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inches, dark brown gravelly loamy sand
3 to 8 inches, gray very gravelly loamy sand

Subsoil:
8 to 21 inches, dark reddish brown and brown very gravelly loamy sand
21 to 28 inches, dark yellowish brown very gravelly loamy sand

Substratum:
28 to 67 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Berkshire and Monadnock soils. Berkshire and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are small areas with less than 3.0 percent stones on the surface and small areas that flood occasionally.

Important Soil Properties

Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid in the organic layer, rapid in the surface soil and subsoil, and very rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil, very strongly acid to moderately acid in the subsoil, and very strongly acid to moderately acid in the substratum

Most areas of this map unit are in woodland. A few small areas are in unimproved pasture or are developed.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing eastern white pine on this map unit is moderately low. The woodland management concerns are equipment limitations and seedling mortality. Stones and boulders on the surface may interfere with equipment operations. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit has few limitations as a site for dwellings. Large stones and boulders may interfere with excavation and backfilling. Cutbanks of excavations are subject to caving or sloughing.

The poor filtering capacity of the soil is the main limitation if this map unit is used for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination. Large stones and boulders may interfere with excavations and backfilling.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

104C—Colton gravelly loamy sand, 8 to 15 percent slopes, extremely stony

This soil is very deep, excessively drained, and strongly sloping. It is on knolls and stream terraces. Stones cover 3 to 15 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inches, dark brown gravelly loamy sand
3 to 8 inches, gray very gravelly loamy sand

Subsoil:
8 to 21 inches, dark reddish brown and brown very gravelly loamy sand
21 to 28 inches, dark yellowish brown very gravelly loamy sand

Substratum:
28 to 67 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Berkshire and Monadnock soils. Berkshire and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are small areas with less than 3.0 percent stones on the surface and small areas that flood occasionally.

Important Soil Properties

Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid in the organic layer, rapid in the surface soil and subsoil, and very rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil, very strongly acid to moderately acid in the subsoil, and very strongly acid to moderately acid in the substratum

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing eastern white pine on this map unit is moderately low. The woodland management concerns are equipment limitations and seedling mortality. Stones and boulders on the surface may interfere with equipment operations. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Large stones and boulders may interfere with excavation and backfilling. Cutbanks of excavations are subject to caving or sloughing.

Slope and the poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. Special slope design of septic tank absorption fields is needed in some places for septic tank absorption fields. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination. Large stones and boulders may interfere with excavations and backfilling.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

104E—Colton gravelly loamy sand, 15 to 50 percent slopes, extremely stony

This soil is very deep, excessively drained, and moderately steep or steep. It is on stream terrace escarpments. Stones cover 3 to 15 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inches, dark brown gravelly loamy sand
3 to 8 inches, gray very gravelly loamy sand

Subsoil:
8 to 21 inches, dark reddish brown and brown very gravelly loamy sand
21 to 28 inches, dark yellowish brown very gravelly loamy sand

Substratum:
28 to 67 inches, olive brown very gravelly coarse sand

Included with this soil in mapping are small areas of Berkshire and Monadnock soils. Berkshire and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are small areas with less than 3.0 percent stones on the surface and small areas that flood occasionally.

Important Soil Properties

Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: A
Permeability: Moderately rapid in the organic layer, rapid in the surface soil and subsoil, and very rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil, very strongly acid to moderately acid in the subsoil, and very strongly acid to moderately acid in the substratum

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture in areas of steep slopes. In moderately steep areas, this map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing eastern white pine on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and seedling mortality. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Stones and boulders on the surface may interfere with equipment operations. The use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months.

This map unit is unsuited for dwellings, in areas of steep slopes. In areas of moderately steep slopes, slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Large stones and boulders may interfere with excavation and backfilling. Cutbanks of excavations are subject to caving or sloughing.

This map unit is unsuited for septic tank absorption fields in areas of steep slopes. In areas of moderately steep slopes, slope and the poor filtering capacity of the soil are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. The soil readily absorbs effluent, but it may not adequately filter the effluent. As a result, the ground water supplies in the area can potentially become contaminated. Seepage can be monitored by periodically testing wells for possible contamination.

This map unit is a probable source of sand and gravel for use as a construction material. The suitability of the sand and gravel for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

105B—Monadnock fine sandy loam, 3 to 8 percent slopes, very stony

This soil is very deep, well drained, and gently sloping. It is on knolls and foot slopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs
2 to 6 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
6 to 8 inches, reddish gray fine sandy loam

Subsoil:
8 to 13 inches, reddish brown gravelly fine sandy loam
13 to 21 inches, brown cobbly fine sandy loam

Substratum:
21 to 31 inches, yellowish brown cobbly loamy sand
31 to 71 inches, olive very cobbly loamy coarse sand

Included with this soil in mapping are small areas of Berkshire, Colton, and Peru soils. Berkshire and Colton soils are throughout the map unit and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet

Hydrologic Group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid below

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings. Cutbanks of excavations are subject to caving or sloughing.

This map unit has few limitations as a site for septic tank absorption fields.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 6s.

105C—Monadnock fine sandy loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on knolls and foot slopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs
2 to 6 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
6 to 8 inches, reddish gray fine sandy loam

Subsoil:
8 to 13 inches, reddish brown gravelly fine sandy loam
13 to 21 inches, brown cobbly fine sandy loam

Substratum:
21 to 31 inches, yellowish brown cobbly loamy sand
31 to 71 inches, olive very cobbly loamy coarse sand

Included with this soil in mapping are small areas of Berkshire, Colton, and Peru soils. Berkshire and Colton soils are throughout the map unit and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately rapid in the substratum

Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 6s.

105D—Monadnock fine sandy loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs
2 to 6 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
6 to 8 inches, reddish gray fine sandy loam

Subsoil:
8 to 13 inches, reddish brown gravelly fine sandy loam
13 to 21 inches, brown cobbly fine sandy loam

Substratum:
21 to 31 inches, yellowish brown cobbly loamy sand
31 to 71 inches, olive very cobbly loamy coarse sand

Included with this soil in mapping are small areas of Berkshire, Colton, and Peru soils. Berkshire and Colton soils are throughout the map unit and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: B

Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Cutbanks of excavations are subject to caving or sloughing.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 6s.

105E—Monadnock fine sandy loam, 25 to 50 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs
2 to 6 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
6 to 8 inches, reddish gray fine sandy loam

Subsoil:
8 to 13 inches, reddish brown gravelly fine sandy loam
13 to 21 inches, brown cobbly fine sandy loam

Substratum:
21 to 31 inches, yellowish brown cobbly loamy sand
31 to 71 inches, olive very cobbly loamy coarse sand

Included with this soil in mapping are small areas of Berkshire, Colton, and Peru soils. Berkshire and Colton soils are throughout the map unit and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 7s.

106B—Berkshire fine sandy loam, 3 to 8 percent slopes, very stony

This soil is very deep, well drained and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows:

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas, the well drained soils with a firm substratum and Peru soils are in depressions and drainageways, and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings and septic tank absorption fields.

This map unit is in land capability subclass 6s.

106C—Berkshire fine sandy loam, 8 to 15 percent slopes, very stony

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas, the well drained soils with a firm substratum and Peru soils are in depressions and drainageways, and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

106D—Berkshire fine sandy loam, 15 to 25 percent slopes, very stony

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas, the well drained soils with a firm substratum and Peru soils are in depressions and drainageways, and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 6s.

106E—Berkshire fine sandy loam, 25 to 50 percent slopes, very stony

This soil is very deep, well drained, and steep. It is on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas, the well drained soils with a firm substratum and Peru soils are in depressions and drainageways, and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes and stones on the surface.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

108B—Peru fine sandy loam, 3 to 8 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and gently sloping. It is on footslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed, leaves, needles, and twigs
1 to 2 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 8 inches, dark brown fine sandy loam

Subsoil:
8 to 22 inches, dark yellowish brown and brown fine sandy loam

Substratum:
22 to 33 inches, mottled, very firm light brownish gray gravelly fine sandy loam
33 to 67 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman, and Tunbridge soils are on slightly higher convex areas, the moderately well drained soils with a friable substratum are in positions similar to Peru soils, and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concern is windthrow. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

108C—Peru fine sandy loam, 8 to 15 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed, leaves, needles, and twigs
1 to 2 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 8 inches, dark brown fine sandy loam

Subsoil:
8 to 22 inches, dark yellowish brown and brown fine sandy loam

Substratum:
22 to 33 inches, mottled, very firm light brownish gray gravelly fine sandy loam
33 to 67 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman, and Tunbridge soils are on slightly higher convex areas; the moderately well drained soils with a friable substratum are in positions similar to Peru soils; and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concern is windthrow. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

108D—Peru fine sandy loam, 15 to 25 percent slopes, very stony

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed, leaves, needles, and twigs
1 to 2 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 8 inches, dark brown fine sandy loam

Subsoil:
8 to 22 inches, dark yellowish brown and brown fine sandy loam

Substratum:
22 to 33 inches, mottled, very firm light brownish gray gravelly fine sandy loam
33 to 67 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman and Tunbridge soils are on slightly higher convex areas; the moderately well drained soils with a friable substratum are in positions similar to Peru soils; and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas of slopes of 20 percent or less, the seasonal high water table, slope, and permeability of the substratum are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

109C—Tunbridge-Berkshire complex, 8 to 15 percent slopes, rocky

This map unit consists of strongly sloping soils on summits, shoulders, and backslopes of knolls, hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Tunbridge soils; 35 percent very deep, well drained Berkshire soils; and 16 percent other soils and areas of rock outcrop. Tunbridge and Berkshire soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, dark brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with these soils in mapping are small areas of Lyman and Peru soils and well drained soils with a firm substratum. Lyman soils are on slightly convex areas near rock outcrops and the well drained soils with a firm substratum and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Tunbridge
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Berkshire
Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concern is windthrow. Areas of Berkshire soils have few management concerns. In areas of Tunbridge soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

Depth to bedrock in areas of Tunbridge soils and slope limit this map unit as a site for dwellings. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Depth to bedrock in areas of Tunbridge soils and slope are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

109D—Tunbridge-Berkshire complex, 15 to 25 percent slopes, rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Tunbridge soils; 35 percent very deep, well drained Berkshire soils; and 16 percent other soils and areas of rock outcrop. Tunbridge and Berkshire soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, dark brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with these soils in mapping are small areas of Lyman and Peru soils and well drained soils with a firm substratum. Lyman soils are on slightly convex areas near rock outcrops and the well drained soils with a firm substratum and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Tunbridge

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Berkshire

Available water capacity: High

Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Some areas are used for pasture and a few small areas are used for hay.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Tunbridge soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

Slope and depth to bedrock in areas of Tunbridge soils limit this map unit as a site for dwellings. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of Tunbridge soils with slopes of greater than 20 percent. In areas of Tunbridge soils with slopes of 20 percent or less and in areas of Berkshire soils, depth to bedrock in areas of Tunbridge soils and moderately steep slopes are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

109E—Tunbridge-Berkshire complex, 25 to 50 percent slopes, rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Tunbridge soils; 35 percent very deep, well drained Berkshire soils; and 16 percent other soils and areas of rock outcrop. Tunbridge and Berkshire soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—
Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, dark brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with these soils in mapping are small areas of Lyman and Peru soils and well drained soils with a firm substratum. Lyman soils are on slightly convex areas near rock outcrops and the well drained soils with a firm substratum and Peru soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Tunbridge
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Berkshire
Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few small areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface, and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Tunbridge soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

111C—Rawsonville-Houghtonville complex, 8 to 15 percent slopes, rocky

This map unit consists of strongly sloping soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Rawsonville soils; 35 percent very deep, well drained Houghtonville soils; and 16 percent other soils and areas of rock outcrop. Rawsonville and Houghtonville soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with these soils in mapping are small areas of Berkshire, Hogback, Monadnock, Mundal, and Tunbridge soils. Hogback soils are on slightly higher convex areas near rock outcrops, Berkshire and Monadnock soils are in positions similar to Houghtonville soils, Tunbridge soils are in positions similar to Rawsonville soils, and Mundal soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Rawsonville

Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Houghtonville

Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Rawsonville soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

Depth to bedrock in areas of Rawsonville soils and slope are the main limitations if this map unit is used as a site for dwellings. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Depth to bedrock in areas of Rawsonville soils and slope are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

111D—Rawsonville-Houghtonville complex, 15 to 25 percent slopes, rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Rawsonville soils; 35 percent very deep, well drained Houghtonville soils; and 16 percent other soils and areas of rock outcrop. Rawsonville and Houghtonville soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with these soils in mapping are small areas of Berkshire, Hogback, Monadnock, Mundal, and Tunbridge soils. Hogback soils are on slightly higher convex areas near rock outcrops, Berkshire and Monadnock soils are in positions similar to Houghtonville soils, Tunbridge soils are in positions similar to Rawsonville soils, and Mundal soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Rawsonville soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

Depth to bedrock in areas of Rawsonville soils and slope are the main limitations if this map unit is used as a site for dwellings. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of Rawsonville soils with slopes of greater than 20 percent. In areas of Rawsonville soils with slopes of 20 percent or less and in areas of Houghtonville soils, depth to bedrock in areas of Rawsonville soils and slope are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

111E—Rawsonville-Houghtonville complex, 25 to 60 percent slopes, rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 49 percent moderately deep, well drained Rawsonville soils; 35 percent very deep, well drained Houghtonville soils; and 16 percent other soils and areas of rock outcrop. Rawsonville and Houghtonville soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with these soils in mapping are small areas of Berkshire, Hogback, Monadnock, Mundal, and Tunbridge soils. Hogback soils are on slightly higher convex areas near rock outcrops, Berkshire and Monadnock soils are in positions similar to Houghtonville soils, Tunbridge soils are in positions similar to Rawsonville soils, and Mundal soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet

Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Rawsonville soils, trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

112C—Rawsonville-Hogback complex, 8 to 15 percent slopes, very rocky

This map unit consists of strongly sloping soils on summits, shoulders, and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Rawsonville soils; 30 percent shallow, well drained Hogback soils; and 20 percent other soils and areas of rock outcrop. Rawsonville and Hogback soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam

8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal, and Tunbridge soils and excessively drained, very shallow soils. Houghtonville and Mundal soils are in areas between rock outcrops; Lyman soils are in positions similar to the Hogback soils; Tunbridge soils are in positions similar to the Rawsonville soils; and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum.

Important Soil Properties

Rawsonville

Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Hogback

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Hogback soils. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of shallow Hogback soils. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

112D—Rawsonville-Hogback complex, 15 to 25 percent slopes, very rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Rawsonville soils; 30 percent shallow, well drained Hogback soils; and 20 percent other soils and areas of rock outcrop. Rawsonville and Hogback soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal, and Tunbridge soils and excessively drained very shallow soils. Houghtonville and Mundal soils are in areas between rock outcrops, Lyman soils are in positions similar to the Hogback soils, Tunbridge soils are in positions similar to the Rawsonville soils, and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Hogback soils. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of shallow Hogback soils and in areas with greater than 20 percent slope. In areas of Rawsonville soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

112E—Rawsonville-Hogback complex, 25 to 60 percent slopes, very rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Rawsonville soils; 30 percent shallow, well drained Hogback soils; and 20 percent other soils and areas of rock outcrop. Rawsonville and Hogback soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal, and Tunbridge soils and excessively drained very shallow soils. Houghtonville and Mundal soils are in areas between rock outcrops, Lyman soils are in positions similar to the Hogback soils, Tunbridge soils are in positions similar to the Rawsonville soils, and the excessively drained very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

113B—Cabot silt loam, 3 to 8 percent slopes, very stony

This soil is shallow to dense basal till and very deep to bedrock. It is poorly drained and gently sloping. It is in depressions and drainageways and on toe slopes and foot slopes of hills, ridges, and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 9 inches, black silt loam

Subsoil:
9 to 15 inches, mottled, olive gray silt loam

Substratum:
15 to 26 inches, mottled, firm greenish gray fine sandy loam
26 to 37 inches, mottled, firm olive gray fine sandy loam
37 to 66 inches, mottled, firm dark olive gray fine sandy loam

Included with this soil in mapping are small areas of Adrian, Mundal, and Peru soils. Adrian soils are in positions similar to Cabot soils and Mundal and Peru soils are on slightly higher convex areas. These soils make up about 15 percent of the map unit.

Also included are soils with a loamy or sandy, friable substratum.

Important Soil Properties

Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 20 inches
Depth to water table: At 0 to 1.5 feet from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or very slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil and subsoil, and moderately acid to slightly alkaline in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table and firm substratum.

Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained soils.

This map unit is in land capability subclass 6s.

114B—Mundal fine sandy loam, 3 to 8 percent slopes, very stony

This soil is moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and gently sloping. It is on footslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Houghtonville, Peru, Rawsonville, and Wilmington soils. Houghtonville and Rawsonville soils are on slightly higher convex areas, Peru soils are in positions similar to the Mundal soils, and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concerns are equipment limitations and windthrow. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow because root growth is limited by the firm substratum.

Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

114C—Mundal fine sandy loam, 8 to 15 percent slopes, very stony

This soil is moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Houghtonville, Peru, Rawsonville, and Wilmington soils. Houghtonville and Rawsonville soils are on slightly higher convex areas, Peru soils are in positions similar to the Mundal soils, and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches

Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. When the soils in this map unit are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow because root growth is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

114D—Mundal fine sandy loam, 15 to 25 percent slopes, very stony

This soil is moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Houghtonville, Peru, Rawsonville, and Wilmington soils. Houghtonville and Rawsonville soils are on slightly higher convex areas, Peru soils are in positions similar to the Mundal soils, and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas of slopes of 20 percent or less, the seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s.

115B—Peru fine sandy loam, 3 to 8 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and gently sloping. It is on footslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark brown fine sandy loam

Subsoil:
6 to 20 inches, dark yellowish brown and brown fine sandy loam

Substratum:
20 to 31 inches, mottled, very firm light brownish gray gravelly fine sandy loam
31 to 65 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman and Tunbridge soils are on slightly higher convex areas, the moderately well drained soils with a friable substratum are in positions similar to Peru soils, and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concern is windthrow. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table is the main limitation if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

The seasonal high water table and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 2e.

115C—Peru fine sandy loam, 8 to 15 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and strongly sloping. It is on ridges and backslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark brown fine sandy loam

Subsoil:
6 to 20 inches, dark yellowish brown and brown fine sandy loam

Substratum:
20 to 31 inches, mottled, very firm light brownish gray gravelly fine sandy loam
31 to 65 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman, and Tunbridge soils are on slightly higher convex areas, the moderately well drained soils with a friable substratum are in positions similar to Peru soils, and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow or moderately slow in the substratum
Potential frost action: High

Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion and the seasonal high water table are management concerns. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is well suited to hay and pasture. The seasonal high water table is a management concern. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Using rotational grazing and limiting access during wet periods and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. The woodland management concern is windthrow. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

The seasonal high water table, slope, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 3e.

115D—Peru fine sandy loam, 15 to 25 percent slopes

This soil is shallow or moderately deep to dense basal till and very deep to bedrock. It is moderately well drained and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 6 inches, dark brown fine sandy loam

Subsoil:
6 to 20 inches, dark yellowish brown and brown fine sandy loam

Substratum:
20 to 31 inches, mottled, very firm light brownish gray gravelly fine sandy loam
31 to 65 inches, mottled, firm olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Berkshire, Cabot, Lyman, and Tunbridge soils and moderately well drained soils with a friable substratum. Berkshire, Lyman, and Tunbridge soils are on slightly higher convex areas; the moderately well drained soils with a friable substratum are in positions similar to Peru soils; and Cabot soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

Also included are small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderate in the surface soil and subsoil and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for pasture. Some areas are used for hay and some are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion, equipment limitations due to slope and the seasonal high water table are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion. Spring tillage may be delayed in some years because of wetness. Cold soil temperatures due to wetness can slow germination.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope and the seasonal high water table are management concerns. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants. Wetness can limit the choice of plants and the period of cutting or grazing and increase the risk of winterkill. Limiting access during wet periods and draining problem areas are common practices.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table and slope are the main limitations if this map unit is used as a site for dwellings. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas with slopes of greater than 20 percent. In areas of slopes of 20 percent or less, the seasonal high water table, slopes, and permeability of the substratum are the main limitations if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 4e.

116D—Lyman-Tunbridge-Rock outcrop complex, 15 to 25 percent slopes, very stony

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent shallow, somewhat excessively drained Lyman soils; 30 percent moderately deep, well drained Tunbridge soils; 10 percent rock outcrop; and 20 percent other soils. Lyman and Tunbridge soils and rock outcrops are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Lyman soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 5 inches, very dark brown fine sandy loam

Subsoil:
5 to 10 inches, dark brown fine sandy loam
10 to 19 inches, brown channery fine sandy loam

Schist bedrock:
19 inches

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The areas of rock outcrop are exposures of schist bedrock on summits, shoulders, backslopes and escarpments.

Included with these soils in mapping are small areas of Berkshire soils and excessively drained very shallow soils. Berkshire soils are in areas between rock outcrops and the excessively drained very shallow soils are on slightly higher convex areas and bedrock escarpments are throughout the map unit. Included soils make up about 20 percent of the map unit.

Important Soil Properties

Lyman

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Tunbridge

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Lyman soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of shallow Lyman soils. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields, in areas of shallow Lyman soils and in areas with greater than 20 percent slope. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 7s.

116F—Lyman-Tunbridge-Rock outcrop complex, 25 to 70 percent slopes, very stony

This map unit consists of steep or very steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 40 percent shallow, somewhat excessively drained Lyman soils; 30 percent moderately deep, well drained Tunbridge soils; 10 percent rock outcrop; and 20 percent other soils. Lyman and Tunbridge soils and rock outcrops are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Lyman soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 5 inches, very dark brown fine sandy loam

Subsoil:
5 to 10 inches, dark brown fine sandy loam
10 to 19 inches, brown channery fine sandy loam

Schist bedrock:
19 inches

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The areas of rock outcrop are exposures of schist bedrock on summits, shoulders, backslopes and escarpments.

Included with these soils in mapping are small areas of Berkshire soils and excessively drained very shallow soils. Berkshire soils are in areas between rock outcrops and the excessively drained very shallow soils are on slightly higher convex areas and bedrock escarpments are throughout the map unit. Included soils make up about 20 percent of the map unit.

Important Soil Properties

Lyman
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Tunbridge
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep to very steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Lyman soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

117B—Berkshire fine sandy loam, 3 to 8 percent slopes

This soil is very deep, well drained, and gently sloping. It is on summits, shoulders, and backslopes of knolls, hills, and ridges. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 3 inches, black fine sandy loam

Surface soil:
3 to 5 inches, grayish brown gravelly fine sandy loam

Subsoil:
5 to 16 inches, brown and dark yellowish brown gravelly fine sandy loam
16 to 30 inches, olive brown gravelly fine sandy loam

Substratum:
30 to 65 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas; the well drained soils with a firm substratum and Peru soils are in depressions and drainageways; and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for hay and pasture. A few areas are used for cultivated crops or are in woodland.

This map unit is well suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

This map unit has few limitations as a site for dwellings and septic tank absorption fields.

This map unit is in land capability subclass 2e.

117C—Berkshire fine sandy loam, 8 to 15 percent slopes

This soil is very deep, well drained, and strongly sloping. It is on summits, shoulders, and backslopes of knolls, hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 3 inches, black fine sandy loam

Surface soil:
3 to 5 inches, grayish brown gravelly fine sandy loam

Subsoil:
5 to 16 inches, brown and dark yellowish brown gravelly fine sandy loam
16 to 30 inches, olive brown gravelly fine sandy loam

Substratum:
30 to 65 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils, and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas; the well drained soils with a firm substratum and Peru soils are in depressions and drainageways; and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for hay and pasture. Some areas are used for cultivated crops. A few areas are in woodland.

This map unit is moderately suited to cultivated crops. The hazard of erosion is a management concern. Including grasses and legumes in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are common practices that help to control erosion.

This map unit is well suited to hay and pasture. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is high. This map unit has few woodland management concerns.

Slope is the main limitation if this map unit is used as a site for dwellings. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 3e.

117D—Berkshire fine sandy loam, 15 to 25 percent slopes

This soil is very deep, well drained, and moderately steep. It is on narrow ridges and backslopes of hills and mountains. Stones cover less that 0.1 percent of the surface.

The typical sequence, depth, and composition of the layers of this soil are as follows—

Surface soil:
0 to 3 inches, black fine sandy loam

Surface soil:
3 to 5 inches, grayish brown gravelly fine sandy loam

Subsoil:
5 to 16 inches, brown and dark yellowish brown gravelly fine sandy loam
16 to 30 inches, olive brown gravelly fine sandy loam

Substratum:
30 to 65 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman, Monadnock, Peru, and Tunbridge soils and well drained soils with a firm substratum. Lyman and Tunbridge soils are on slightly higher convex areas; the well drained soils with a firm substratum and Peru soils are in depressions and drainageways; and Monadnock soils are throughout the map unit. Included soils make up about 15 percent of the map unit.

Also included are soils with greater than 35 percent rock fragments in the surface soil and subsoil and small areas with more than 0.1 percent stones on the surface.

Important Soil Properties

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderate or moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to moderately acid throughout the soil

Most areas of this map unit are cleared and used for pasture. A few areas are used for hay or are in woodland.

This map unit is poorly suited to cultivated crops. The hazard of erosion and equipment limitations due to slope are management concerns. Reducing the use of row crops in the crop rotation, using a conservation tillage system that leaves crop residue on the surface, and tilling along the contour are practices that help to control erosion.

This map unit is moderately suited to hay and pasture. Equipment limitations due to slope is a management concern. Using rotational grazing and maintaining soil fertility levels help to promote a good stand of hay and forage plants.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion and equipment limitations. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope.

Slope is the main limitation if this map unit is used as a site for dwellings. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

This map unit is in land capability subclass 4e.

118C—Tunbridge-Lyman complex, 8 to 15 percent slopes, very rocky

This map unit consists of strongly sloping soils on summits, shoulders, and backslopes of knolls, hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Tunbridge soils; 30 percent shallow, somewhat excessively drained Lyman soils; and 20 percent other soils and areas of rock outcrop. Tunbridge and Lyman soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Lyman soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 5 inches, very dark brown fine sandy loam

Subsoil:
5 to 10 inches, dark brown fine sandy loam
10 to 19 inches, brown channery fine sandy loam

Schist bedrock:
19 inches

Included with this soil in mapping are small areas of Berkshire and Peru soils and excessively drained, very shallow soils. Berkshire soils are in areas between rock outcrops, Peru soils are in drainageways and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Tunbridge

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Lyman

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops. Some areas are used for unimproved pasture. Rotational grazing and limiting access during wet periods, help to maintain a good stand and control erosion.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the seedling mortality and windthrow. In areas of Lyman soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Lyman soils. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Lyman soils. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

118D—Tunbridge-Lyman complex, 15 to 25 percent slopes, very rocky

This map unit consists of moderately steep soils on narrow ridges and backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Tunbridge soils; 30 percent shallow, somewhat excessively drained Lyman soils; and 20 percent other soils and areas of rock outcrop. Tunbridge and Lyman soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Lyman soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 5 inches, very dark brown fine sandy loam

Subsoil:
5 to 10 inches, dark brown fine sandy loam
10 to 19 inches, brown channery fine sandy loam

Schist bedrock:
19 inches

Included with this soil in mapping are small areas of Berkshire and Peru soils and excessively drained, very shallow soils. Berkshire soils are in areas between rock outcrops, Peru soils are in drainageways and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Tunbridge
Available water capacity: Low
Depth to bedrock: 20 to 40 inches

Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Lyman
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: D
Permeability: Moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. A few small areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Lyman soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of shallow Lyman soils. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of shallow Lyman soils and in areas with greater than 20 percent slope. In areas of Tunbridge soils, depth to bedrock and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s.

118E—Tunbridge-Lyman complex, 25 to 60 percent slopes, very rocky

This map unit consists of steep soils on backslopes of hills and mountains. Stones cover 0.1 to 3 percent of the surface. This map unit consists of 50 percent moderately deep, well drained Tunbridge soils; 30 percent shallow, somewhat excessively drained Lyman soils; and 20 percent other soils and areas of rock outcrop. Tunbridge and Lyman soils are so intermingled that it was not practical to map them separately.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Lyman soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 5 inches, very dark brown fine sandy loam

Subsoil:
5 to 10 inches, dark brown fine sandy loam
10 to 19 inches, brown channery fine sandy loam

Schist bedrock:
19 inches

Included with this soil in mapping are small areas of Berkshire and Peru soils and excessively drained, very shallow soils. Berkshire soils are in areas between rock outcrops, Peru soils are in drainageways and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Tunbridge

Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Lyman

Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet

Hydrologic group: D
Permeability: Moderately rapid throughout the soil
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Lyman soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s.

221F—Tunbridge-Berkshire association, very steep, rocky

This map unit consists of steep or very steep soils on deeply dissected backslopes of hills and mountains adjacent to major streams and brooks. Slopes range from 35 to 70 percent. This map unit is mostly at elevations between 1,400 and 2,000 feet. Stones cover from 0.1 to 3 percent of the surface. The map unit consists of 44 percent well drained, moderately deep Tunbridge soils; 40 percent well drained, very deep Berkshire soils; and 16 percent other soils and areas of rock outcrop. Rock outcrops make up from 0.1 to 2 percent of the map unit. Tunbridge soils are near rock outcrops and Berkshire soils are between rock outcrops.

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

Included with this soil in mapping are small areas of Lyman soils and excessively drained, very shallow soils. Lyman soils and the excessively drained and the very shallow soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with greater than 35 percent rock fragments in the subsoil and substratum and soils with more than 0.1 percent boulders on the surface.

Important Soil Properties

Tunbridge soils
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Berkshire
Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Due to the very steep slopes, this map unit is seldom actively managed for commercial, recreational, or other purposes.

Sugar maple, beech and, to a lesser extent, red spruce dominate the late successional tree community. Red spruce and hemlock dominate on the steepest and shallowest soils in this map unit.

Yellow birch, white ash and, under 1,800 feet elevation, northern red oak are early successional species that persist well. Due to the very steep slopes, aspect can strongly influence the type of vegetation. Beech and northern red oak are important on south-facing slopes.

Striped maple, hobblebush, mountain maple, red elderberry, blackberry, and alternate leaf dogwood are common shrubs in this map unit. Common ground flora species include Christmas fern, spinulose wood fern, wood sorrel, jack-in-the-pulpit, trillium, and shining club moss.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep to very steep slopes, stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Tunbridge soils, trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s.

403B—Cabot-Carlisle association, undulating, very stony

This map unit consists of nearly level to rolling soils. Cabot soils are in depressions, drainageways, toe slopes, and foot slopes of hills and mountains. Carlisle soils are in marshes and swamps. Bogs, streams, beaver ponds and beaver meadows are common in this map unit. Slopes range from 0 to 15 percent, with Carlisle soils on slopes less than 2 percent. This map unit is mostly at elevations of 1,200 to 2,300 feet. Some areas of this map unit have water ponded on the surface for long periods throughout the year. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 70 percent shallow to dense basal till, very deep to bedrock, poorly drained Cabot soils; 15 percent very deep, very poorly drained Carlisle soils; and 15 percent other soils. Cabot soils are on slightly higher landscape positions than Carlisle soils.

The typical sequence, depth, and composition of the layers of the Cabot soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 9 inches, black silt loam

Subsoil:
9 to 15 inches, mottled, olive gray silt loam

Substratum:
15 to 26 inches, mottled, firm greenish gray fine sandy loam
26 to 37 inches, mottled, firm olive gray fine sandy loam
37 to 65 inches, mottled, firm dark olive gray fine sandy loam

The typical sequence, depth, and composition of the layers of the Carlisle soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed sphagnum moss, leaves, needles, and twigs
1 to 4 inches, black mucky peat
4 to 65 inches, dark reddish brown muck

Included with these soils in mapping are small areas of Adrian, Berkshire, Monadnock, and Peru soils and poorly drained soils with a friable substratum. Adrian soils are in positions similar to Carlisle soils; Berkshire, Monadnock and Peru soils are on slightly higher convex areas; and the poorly drained soils with a friable substratum are in positions similar to the Cabot soils. Included soils make up about 15 percent of the map unit.

Also included are mineral soils with a friable substratum.

Important Soil Properties

Cabot
Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 20 inches
Depth to water table: At 0 to 1.5 feet from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or very slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil and subsoil, and moderately acid to slightly alkaline in the substratum

Carlisle
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Ponded to 0.5 feet below the surface year round
Hydrologic group: A/D
Permeability: Moderately slow to moderately rapid throughout the soil
Potential frost action: High
Reaction: extremely acid to strongly acid in the surface organic layer and very strongly acid to neutral in the mineral layers

Most areas of this map unit are in woodland, except for occasional bogs, beaver meadows, and beaver ponds. Timber and wetland habitat management are important activities in this map unit. This map unit often provides excellent winter cover for deer.

Sugar maple and red spruce are the dominant tree species in the climax forest community. Balsam fir, hemlock, and American beech are also common and occur frequently in the climax forest. Sugar maple and yellow birch are very common in early successional forest communities and persist well into the late successional community.

Striped maple and pin cherry are the dominant shrub species on the drier portions of this map unit. Willow and alder dominate the wet areas. Hobblebush, red osier dogwood, smooth gooseberry, serviceberry, and raspberry are common shrubs. Common ground flora that indicate wet sites include purple or yellow avens, royal fern, ostrich fern, wood horsetail, early and tall meadow rue, stinging nettles, slender nettles, wood nettles, marsh marigolds, bugleweed, cut-leafed water horehound, and jewelweed.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and poorly drained and very poorly drained soils.

The potential productivity for growing sugar maple on this map unit is very low. In areas of Cabot soils, the woodland management concerns are equipment limitations, seedling mortality, and windthrow. Areas of Carlisle soils are unsuited for woodland management because of very poorly drained soils and the hazard of ponding. The operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. The use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow because root growth is limited by the seasonal high water table and firm substratum. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of poorly drained and very poorly drained soils.

This map unit is in land capability subclass 6s.

405D—Berkshire-Tunbridge association, hilly, very stony

This map unit consists of undulating to steep soils on backslopes, shoulders, and summits of knolls, hills, and ridges. Slopes range from 3 to 35 percent. This map unit is mostly at elevations between 1,200 to 2,000 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 50 percent very deep, well drained Berkshire soils; 40 percent moderately deep, well drained Tunbridge soils; and 10 percent other soils. Berkshire soils are mostly on broad ridges and lower backslopes while Tunbridge soils are on upper backslopes, knolls, and ridges.

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Tunbridge soils are as follows—

Organic layer:
0 to 1 inch, moderately decomposed leaves, needles, and twigs

Surface soil:
1 to 3 inches, very dark grayish brown fine sandy loam

Subsoil:
3 to 16 inches, brown and dark yellowish brown fine sandy loam
16 to 24 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
24 inches

Included with these soils in mapping are small areas of Cabot, Lyman, and Peru soils. Cabot and Peru soils are in depressions and drainageways and Lyman soils are on slightly higher convex areas. Included soils make up about 10 percent of the map unit.

Also included are soils with less than 0.1 percent stones on the surface.

Important Soil Properties

Berkshire

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Tunbridge
Available water capacity: Low
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential front action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Logging, wildlife management, and forest recreation are the primary uses.

Sugar maple and beech are the major tree species in the climax community. Red spruce is commonly associated. The red spruce and hemlock can dominate on the moderately deep Tunbridge soils. Sugar maple is the dominant early successional species and it persists well into the late successional tree community. Other early successional species, like yellow birch, white ash, white pine, paper birch, black cherry and big tooth aspen do not persist well. Northern red oak is a common component of the early successional community.

Striped maple, hobblebush, and serviceberry are common shrubs. Common ground flora are hayscented fern, sessile bellewort, wood sorrel, spinulose wood fern, Canada mayflower, asters, mosses, goldthread, and at lower elevations certain club mosses, bracken fern, and New York fern. Ferns and shrubs can be abundant and restrict tree regeneration in openings larger than an acre.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. In moderately steep to steep areas, promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary help control erosion. In moderately steep to steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Tunbridge soils, trees are commonly subject to windthrow, because root growth is limited by depth to bedrock.

Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings, in areas of steep slopes. This map unit has few limitations in areas of gently sloping Berkshire soils. In other areas, depth to bedrock in areas of Tunbridge soils and strong and moderately steep slopes are the major limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas of Tunbridge soils with slopes of greater than 20 percent and in areas of Berkshire soils with steep slopes. In areas of Tunbridge soils with slopes of 20 percent or less, slope and depth to bedrock is the major limitation. In areas of Berkshire soils, slope is the major limitation. Areas of gently sloping Berkshire soils have few limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in some places is needed to raise the field the required distance above the bedrock.

This map unit is in land capability subclass 6s

413D—Peru-Berkshire-Cabot association, hilly, very stony

This map unit consists of nearly level to hilly soils on summits, shoulders, and backslopes of knolls, hills, and ridges, on foot slopes and toe slopes of hills and mountains, and in depressions and drainageways. Slopes range from 0 to 25 percent, with Cabot soils generally on slopes less than 8 percent and Peru and Berkshire soils on slopes greater than 3 percent. This map unit is mostly at elevations below 2,000 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 60 percent shallow or moderately deep to dense basal till, very deep to bedrock, moderately well drained Peru soils; 15 percent very deep, well drained Berkshire soils; 15 percent shallow to dense basal till, very deep to bedrock, poorly drained Cabot soils; and 10 percent other soils. The Peru and Berkshire soils are on convex ridges and hillsides. The Cabot soils are in depressions and on nearly level areas on ridges.

The typical sequence, depth, and composition of the layers of the Peru soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs
1 to 2 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 8 inches, dark brown fine sandy loam

Subsoil:
8 to 22 inches, dark yellowish brown and brown fine sandy loam

Substratum:
22 to 33 inches, mottled, very firm light brownish gray gravelly fine sandy loam
33 to 67 inches, mottled, firm olive brown gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Berkshire soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 4 inches, black fine sandy loam
4 to 6 inches, grayish brown gravelly fine sandy loam

Subsoil:
6 to 17 inches, brown and dark yellowish brown gravelly fine sandy loam
17 to 31 inches, olive brown gravelly fine sandy loam

Substratum:
31 to 66 inches, light olive brown gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Cabot soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves, needles, and twigs

Surface soil:
1 to 9 inches, black silt loam

Subsoil:
9 to 15 inches, mottled, olive gray silt loam

Substratum:
15 to 26 inches, mottled, firm greenish gray fine sandy loam

26 to 37 inches, mottled, firm olive gray fine sandy loam
37 to 66 inches, mottled, firm dark olive gray fine sandy loam

Included with these soils in mapping are small areas of Carlisle, Lyman, and Tunbridge soils. Carlisle soils are in depressions and drainageways and Lyman and Tunbridge soils are on slightly higher convex areas. Included soils make up about 10 percent of the map unit.

Also included are well drained soils with a firm or very firm substratum and small areas with less than 0.1 percent stones on the surface.

Important Soil Properties

Peru

Available water capacity: Low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 18 to 36 inches
Depth to water table: Perched at 1.3 to 2.5 feet below the surface from November to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or moderately slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid below

Berkshire

Available water capacity: High
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: B
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid below

Cabot

Available water capacity: Very low
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 20 inches
Depth to water table: At 0 to 1.5 feet from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and slow or very slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, strongly acid to neutral in the surface soil and subsoil, and moderately acid to slightly alkaline in the substratum

Most areas of this map unit were farmed in the past. These abandoned farms are now in woodland upland wildlife openings. Timber harvesting and a variety of recreational activities are the common uses for this map unit.

Sugar maple and red spruce are the dominant tree species in the climax forest community. Hemlock is an associated species. Deer wintering areas of spruce or hemlock are common on this map unit. White ash, yellow birch, black cherry and sugar maple are the dominant subclimax species. These species are highly competitive and persistent. White pine and aspen are common pioneer species but they do not persist well.

A large number of species occur in the shrub and ground flora layers. Striped maple, hobblebush, and raspberry are very common. Hayscented fern, spinulose wood fern, sessile bellewort, wood sorrel, and a number of other species are the common ground flora. On the poorly drained Cabot soils, wet site plant indicators include sensitive fern, false hellebore, wood horsetail, tall meadow rue, wood nettle and cinnamon fern.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface.

The potential productivity for growing sugar maple is low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. In moderately steep areas, promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. In areas of Cabot soils, the operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. In areas of Cabot soils, the use of water tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum in areas of Peru and Cabot soils and the seasonal high water table in areas of Cabot soils. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of poorly drained Cabot soils. The seasonal high water table in areas of the Peru soils and slope are the main limitations. Areas of gently sloping Berkshire soils have few limitations. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited for septic tank absorption fields in areas of Peru soils with slopes of greater than 20 percent and in areas of poorly drained Cabot soils. In other areas, the seasonal high water table and permeability of the substratum in Peru soils and slope are the main limitations. Areas of gently sloping Berkshire soils have few limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum in areas of Peru soils.

This map unit is in land capability subclass 6s

702E—Rawsonville-Hogback association, very hilly, very rocky

This map unit consists of steep soils on backslopes of hills and mountains. Slopes range from 25 to 60 percent. This map unit is mostly at elevations of 1,800 to 2800 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 55 percent moderately deep, well drained Rawsonville soils; 30 percent shallow, well drained Hogback soils; and 15 percent other soils and areas of rock outcrop. Hogback soils are near rock outcrops and Rawsonville soils are between rock outcrops.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
3 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

Included with these soils in mapping are small areas of Houghtonville, Lyman, and Tunbridge soils, and well drained, very shallow soils. Lyman soils are in positions similar to Hogback soils; Houghtonville soils are in areas between rock outcrops; Tunbridge soils are in positions similar to Rawsonville soils; and the very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 10 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers

Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland.

American beech, sugar maple and red spruce are the dominant tree species in the climax forest community. Yellow birch is an important subclimax species and persists well into the development of the climax community.

Striped maple, hobblebush, mountain maple, serviceberry, and red elderberry are the dominant shrub species. Common ground flora include spinulose wood fern, hayscented fern, shining club moss and other mosses, wood sorrel, Canada mayflower, clintonia, false solomon's seal, Jack-in-the-Pulpit, wild sarsaparilla, trillium species and whorled wood aster. Shrubs and ferns compete strongly with desired future trees in openings created by logging.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

The potential productivity for sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and depth to bedrock.

This map unit is in land capability subclass 7s

703C—Mundal-Houghtonville association, rolling, very stony

This map unit consists of undulating to hilly soils on ridges and backslopes of hills and mountains. Slopes range from 3 to 25 percent. This map unit is mostly at elevations of 2,000 feet and higher. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 85 percent moderately deep to dense basal till, very deep to bedrock, moderately well drained Mundal soils; 10 percent very deep, well drained Houghtonville soils; and 5 percent other soils.

The typical sequence, depth, and composition of the layers of the Mundal soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs,

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

Included with this soil in mapping are small areas of Cabot, Rawsonville, and Wilmington soils. Cabot and Wilmington soils are in depressions and drainageways and Rawsonville soils are on slightly higher convex areas. Included soils make up about 5 percent of the map unit.

Also included are soils with a thinner spodic horizon and small areas with less than 0.1 percent stones on the surface.

Important Soil Properties

Mundal
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid below

Most areas of this map unit are in woodland. Timber harvesting, hiking, hunting, camping and picnicking, snowmobiling and cross-country skiing are common activities on this map unit.

Sugar maple and American beech are the dominant species in the climax tree community. Red spruce is also an abundant species. Sugar maple, yellow birch, white ash, and black cherry are common early successional tree species and they persist well during development of the climax community.

Striped maple and hobblebush are common and abundant shrubs. Blackberry and raspberry are dominant in abandoned clearings. The ground flora community is unusually rich, with about 60 species represented. Spinulose wood fern, wood sorrel, lady fern, shining club moss, hayscented fern, asters, sessile bellewort, wild sarsaparilla, Canada mayflower and clintonia are common ground flora. Species such as jack-in-the-pulpit, sedges, New York fern, false hellebore and jewelweed are common indicators of seeps and wet spots.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface.

The potential productivity for growing sugar maple on this map unit is moderate. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. In strongly sloping to moderately steep areas, promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Mundal soils, trees are commonly subject to windthrow, because root growth, is limited by the firm substratum. Even aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

The seasonal high water table in areas of the Mundal soils and slope are the main limitations if this map unit is used as a site for dwellings. Areas of gently sloping Houghtonville soils have few limitations. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited for septic tank absorption fields, in areas of Mundal soils with slopes of greater than 20 percent. In other areas, the seasonal high water table and permeability of the substratum in Mundal soils and slope are the main limitations. Areas of gently sloping Houghtonville soils have few limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum in areas of Peru soils.

This map unit is in land capability subclass 6s

705D—Rawsonville-Houghtonville-Mundal association, hilly, rocky

This map unit consists of undulating to steep soils on ridges and backslopes of hills and mountains. Slopes range from 3 to 35 percent. This map unit is mostly at elevations between 1,900 and 2,500 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of about 54 percent moderately deep, well drained Rawsonville soils; 25 percent very deep, well drained Houghtonville soils; 15 percent moderately deep to dense basal till, very deep to bedrock, moderately well drained Mundal soils; and 6 percent other soils and areas of rock outcrop. Rawsonville soils are near rock outcrops and Houghtonville and Mundal soils are between rock outcrops.

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

The typical sequence, depth, and composition of the layers of the Mundal soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves
1 to 3 inches, moderately decomposed leaves

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 65 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with these soils in mapping are small areas of Hogback and Wilmington soils. Hogback soils are on slightly higher convex areas near rock outcrops and Wilmington soils are in depressions and drainageways. Included soils make up about 5 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with a thinner spodic horizon and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Mundal
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Timber harvesting, hiking, hunting, camping, cross country skiing and snowmobiling are common activities.

American beech and sugar maple are the dominant tree species in the climax forest community. Red spruce is also an important species. Yellow birch and white ash are abundant early successional species and they persist well as the late successional community develops. Black cherry and sugar maple also occur occasionally.

Striped maple and hobblebush are the most abundant shrubs on this map unit, along with mountain maple. Pin cherry, blackberry, raspberry, and red elderberry are common in openings. The most abundant ground flora are wood sorrel, hayscented fern, sessile bellewort, woodland sedge, Christmas fern, false solomon's seal, wild sarsaparilla, New York fern and trillium.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. In strongly sloping to steep areas, promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep to steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock in areas of Rawsonville soils and the firm substratum in areas of Mundal soils. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of steep slopes. The seasonal high water table in areas of the Mundal soils, depth to bedrock in areas of Rawsonville soils, and slope are the main limitations. Areas of gently sloping Houghtonville soils have few limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited for septic tank absorption fields in areas of Mundal soils with slopes of greater than 20 percent and in areas of steep slopes. In other areas, depth to bedrock in areas of Rawsonville soils, the seasonal high water table and permeability of the substratum in Mundal soils, and slope are the main limitations. Areas of gently sloping Houghtonville soils have few limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum in areas of Peru soils and the bedrock in areas of Rawsonville soils.

This map unit is in land capability subclass 6s

715D—Houghtonville-Rawsonville association, hilly, rocky

This map unit consists of rolling to steep soils on ridges and backslopes of hills and mountains. Slopes range from 8 to 35 percent. This map unit is mostly at elevations between 2,100 and 3,000 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of about 50 percent very deep, well drained Houghtonville soils; 34 percent moderately deep, well drained Rawsonville soils; and 16 percent other soils and areas of rock outcrop. Rawsonville soils are on convex areas near rock outcrops and Houghtonville soils are between rock outcrops.

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

Included with these soils in mapping are small areas of Berkshire, Hogback, Mundal soils, and Wilmington soils. Berkshire soils are in positions similar to Houghtonville soils, Hogback soils are on slightly higher convex areas near rock outcrops and Mundal and Wilmington soils are in depressions and drainageways. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 1 percent of this map unit.

Also included are soils with a thinner spodic horizon and small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. Timber harvesting, hiking, hunting, camping, cross-country skiing and snowmobiling are common activities.

American beech is the primary tree species in the climax forest community. Sugar maple and red spruce are important but are less abundant. Yellow birch is the most abundant early successional species and it persists into the climax community. Sugar maple is also important in the early successional community.

Striped maple and hobblebush are very abundant shrubs and they strongly compete with desired tree species. Mountain maple and blackberry are other common shrubs. Ground flora species include wood sorrel, spinulose wood fern, hayscented fern, shining club moss, New York fern, Indian cucumber root, clintonia, and Canada mayflower.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface and rock outcrops.

The potential productivity for growing sugar maple on this map unit is moderately low. The woodland management concerns are the hazard of erosion, equipment limitations, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep to steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives the soils a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Rawsonville soils, trees are commonly subject to windthrow, because root growth is limited by depth to bedrock.

Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of steep slopes. Depth to bedrock in areas of Rawsonville soils and slope are the main limitations. Bedrock has to be removed where deep excavations are necessary. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

This map unit is unsuited for septic tank absorption fields in areas Rawsonville soils with slopes of greater than 20 percent and in areas of steep slopes. Depth to bedrock in areas of Rawsonville soils and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the bedrock.

This map unit is in land capability subclass 6s

902F—Hogback-Rawsonville-Rock outcrop association, very steep, very stony

This map unit consists of steep or very steep soils on backslopes of hills and mountains. Slopes range from 35 to 70 percent. This map unit is at elevations between 2,000 and 3,000 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of 45 percent shallow, well drained Hogback soils; 30 percent moderately deep, well drained Rawsonville soils; 10 percent rock outcrop; and 15 percent other soils. Hogback soils are on convex areas near rock outcrops and Rawsonville soils are in areas between rock outcrops.

The typical sequence, depth, and composition of the layers of the Hogback soils are as follows—

Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs

Surface soil:
2 to 6 inches, black fine sandy loam
6 to 8 inches, brown gravelly fine sandy loam

Subsoil:
8 to 13 inches, dark reddish brown gravelly fine sandy loam
13 to 17 inches, dark brown very gravelly fine sandy loam

Schist bedrock:
17 inches

The typical sequence, depth, and composition of the layers of the Rawsonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs

Surface soil:
2 to 3 inch, black fine sandy loam

Subsoil:
3 to 8 inches, dark brown gravelly fine sandy loam
8 to 20 inches, dark reddish brown gravelly fine sandy loam
20 to 25 inches, dark grayish brown gravelly fine sandy loam

Schist bedrock:
25 inches

Included with these soils in mapping are small areas of Houghtonville, Lyman, Mundal, and Tunbridge soils and excessively drained, very shallow soils. Lyman soils are in positions similar to Hogback, Houghtonville, and Mundal soils are in areas between rock outcrops, Tunbridge soils are in positions similar to Rawsonville soils, and the excessively drained, very shallow soils are on slightly higher convex areas near rock outcrops. Included soils make up about 15 percent of the map unit.

Important Soil Properties

Hogback
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Rawsonville
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland.

American beech, sugar maple, and red spruce are the dominant tree species in the climax forest community. Yellow birch is an important subclimax species and persists well into the development of the climax community.

Striped maple, hobblebush, mountain ash, blackberry and mountain maple are the dominant shrub species. Common ground flora, include spinulose wood fern, wood sorrel, Canada mayflower, clintonia, asters, and violets. Shrubs and ferns compete strongly with desired future trees in clearings created by logging.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep to very steep slopes, stones on the surface, and rock outcrops.

The potential productivity for growing sugar maple on this map unit is very low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. Locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Hogback soils, the use of drought-tolerant planting stock or planting in the spring when there is sufficient soil moisture will help minimize seedling mortality during dry summer months. Trees are commonly subject to windthrow, because root growth, is limited by depth to bedrock. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes.

This map unit is in land capability subclass 7s

903C—Mundal-Wilmington association, rolling, very stony

This map unit consists of undulating to hilly soils on ridges and in depressions and on backslopes of hills and mountains. Slopes range from 3 to 25 percent, with the Wilmington soils on slopes less than 8 percent. This map unit is mostly at elevations of 1,900 to 2,300 feet. Shallow, intermittent streams are common in this map unit. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of about 70 percent moderately deep to dense basal till, very deep to bedrock, moderately well drained Mundal soils; 15 percent shallow or moderately deep to dense basal till, very deep to bedrock, poorly drained Wilmington soils; and 15 percent other soils. The Mundal soils are on slightly higher convex areas and the Wilmington soils are in concave areas, such as depressions and drainageways.

The typical sequence, depth, and composition of the layers of the Mundal soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves
1 to 3 inches, moderately decomposed leaves

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Wilmington soils are as follows—

Organic layer:
0 to 2 inch moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 5 inches, black fine sandy loam
5 to 6 inches, dark gray fine sandy loam

Subsoil:
6 to 20 inches, mottled, black fine sandy loam
20 to 26 inches, mottled, dark brown fine sandy loam

Substratum:
26 to 67 inches, mottled, very firm olive gray gravelly fine sandy loam

Included with this soil in mapping are small areas of Cabot, Carlisle, Houghtonville, and Rawsonville soils. Cabot and Carlisle soils are in positions similar to Wilmington soils and Houghtonville and Rawsonville soils are on slightly higher convex areas. Included soils make up about 15 percent of the map unit.

Also included are soils with a thinner spodic horizon and small areas with less than 0.1 percent stones on the surface.

Important Soil Properties

Mundal
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Wilmington
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 24 inches
Depth to water table: At 0 to 1.5 feet below the surface from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Timber management, wetland habitat management, deer wintering areas and dispersed recreational activities, such as hiking and camping, are common uses of this map unit.

American beech is the dominant tree species in the climax forest community with sugar maple and red spruce occurring in lesser amounts. Yellow birch is the dominant early successional tree species and it tends to persist well into the late successional community. Other tree species found in minor amounts in the early successional forest community include sugar maple, black cherry, white ash, and aspen.

Striped maple and hobblebush are the most common shrub species with lesser amounts of mountain maple, blackberry, choke cherry and red elderberry. Common ground flora species are spinulose wood fern, hayscented fern, lady fern, asters, wood sorrel, clintonia, trillium species and sessile bellewort.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface.

The potential productivity for growing sugar maple is moderately low. The woodland management concerns are the hazard of erosion, equipment limitations, seedling mortality, and windthrow. Promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When the soils in this map unit are wet, the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Wilmington soils, the operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. In areas of Wilmington soils, the use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum in areas of Mundal and Wilmington soils and the seasonal high water table in areas of Wilmington soils. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of poorly drained Wilmington soils. In areas of Mundal soils, the seasonal high water table and slope are the main limitations. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited for septic tank absorption fields in areas of Mundal soils with slopes of greater than 20 percent and in areas of poorly drained Wilmington soils. In areas of Mundal soils with slopes of 20 percent or less, the seasonal high water table, permeability of the substratum, and slope are the main limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s

905D—Houghtonville-Monadnock association, hilly, very stony

This map unit consists of undulating to hilly soils on knolls, ridges, and foot slopes of hills and mountains. Slopes range from 3 to 25 percent. This map unit is generally at elevations of 2,000 feet and higher. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of about 75 percent very deep, well drained Houghtonville soils; 15 percent very deep, well drained Monadnock soils; and 10 percent other soils.

The typical sequence, depth, and composition of the layers of the Houghtonville soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 2 inches, moderately decomposed leaves and twigs,

Surface soil:
2 to 4 inches, dark brown fine sandy loam

Subsoil:
4 to 9 inches, very dark grayish brown gravelly fine sandy loam
9 to 37 inches, dark brown gravelly fine sandy loam

Substratum:
37 to 67 inches, dark grayish brown fine sandy loam

The typical sequence, depth, and composition of the layers of the Monadnock soils are as follows—
Organic layer:
0 to 2 inches, slightly decomposed leaves, needles, and twigs
2 to 6 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
6 to 8 inches, reddish gray fine sandy loam

Subsoil:
8 to 13 inches, reddish brown gravelly fine sandy loam
13 to 21 inches, brown cobbly fine sandy loam

Substratum:
21 to 31 inches, yellowish brown cobbly loamy sand
31 to 71 inches, olive very cobbly loamy coarse sand

Included in the mapping of this map unit are small areas of Berkshire, Colton, Mundal, and Rawsonville soils. Berkshire soils are scattered throughout the map unit, the Mundal soils are in drainageways, the Rawsonville soils are near knolls underlain by bedrock, and the Colton soils are on small knolls near Monadnock soils. Included soils make up about 10 percent of the map unit.

Also included are small areas with more than 3.0 percent stones on the surface.

Important Soil Properties

Houghtonville
Available water capacity: Very high
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid in the mineral layers
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Monadnock
Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: B
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately rapid in the substratum
Potential frost action: Low
Reaction: Extremely acid to strongly acid in the organic layer and extremely acid to moderately acid in the mineral layers

Most areas of this map unit are in woodland. Timber harvesting, hiking, hunting, camping and picnicking, snowmobiling and cross-country skiing are common activities on this map unit. Small gravel pits are also common on this map unit.

Sugar maple and American beech dominate late successional stands. Red spruce and balsam fir are minor components. Sugar maple, yellow birch, and black cherry are persistent mid-successional species.

Striped maple and hobblebush are common shrubs. Characteristic ground flora include spinulose wood fern, true mosses, shining club moss, wood sorrel, sarsaparilla, Canadian mayflower, and clintonia. Wolf’s claw club moss occurs on sand and gravel deposits.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface.

The potential productivity for growing sugar maple is moderately low. The woodland management concerns are the hazard of erosion and equipment limitations. In strongly sloping to moderately steep areas, promptly establishing plant cover on areas disturbed by logging operations and installing culverts and water bars as necessary helps control erosion. In moderately steep areas, locating skid trails and haul roads along the slope helps to minimize equipment limitations associated with slope. When areas of Hougtonville soils are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment.

Slope is the main limitation if this map unit is used as a site for dwellings. Gently sloping areas have few limitations. Extensive land shaping and grading may be required. Erosion is a hazard in areas cleared for construction. Preserving existing plant cover and establishing vegetation on disturbed areas immediately after construction will help to reduce erosion.

Slope is the main limitation if this map unit is used for septic tank absorption fields. Gently sloping areas have few limitations. Special slope design, such as installing septic system absorption fields on the contour, is needed to overcome the slope limitation.

The Monadnock soils are a probable source of sand for use as a construction material. The suitability of the sand for specific purposes has not been evaluated.

This map unit is in land capability subclass 6s

913E—Glebe-Stratton association, very hilly, very rocky

This map unit consists of steep soils on upper ridges and summits, shoulders, and backslopes of mountains. Slopes range from 25 to 60 percent. This map unit is mostly at elevations greater than 2,800 feet. Stones cover 0.1 to 3 percent of the surface. This map unit consists of about 60 percent moderately deep, well drained Glebe soils; 20 percent shallow, well drained Stratton soils; and 20 percent other soils and areas of rock outcrop. Bedrock outcrops make up about 5 percent of the map unit. Stratton soils are on convex areas near rock outcrops and Glebe soils are in deeper areas between rock outcrops.

The typical sequence, depth, and composition of the layers of the Glebe soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed moss, leaves, needles, and twigs
1 to 3 inches, moderately decomposed leaves, needles, and twigs

Surface soil:
3 to 7 inches, black fine sandy loam
7 to 11 inches, dark gray gravelly fine sandy loam

Subsoil:
11 to 19 inches, very dark gray gravelly fine sandy loam
19 to 28 inches, dark reddish brown and dark yellowish brown gravelly fine sandy loam

Schist bedrock:
28 inches

The typical sequence, depth, and composition of the layers of the Stratton soils are as follows—

Organic layer:
0 to 1 inches, slightly decomposed needles, moss, and twigs

Surface soil:
1 to 5 inches, black channery silt loam
5 to 7 inches, brown very channery silt loam

Subsoil:
7 to 15 inches, dark reddish brown very channery silt loam
15 to 20 inches, reddish brown very channery silt loam

Schist bedrock:
20 inches

Included with these soils in mapping are small areas of well drained Hogback, Houghtonville and Rawsonville soils and excessively drained, very shallow soils. Hogback, Houghtonville and Rawsonville soils are at lower elevations within the map unit and the excessively drained, very shallow soils are near rock outcrops. Included soils make up about 15 percent of the map unit.

The areas of rock outcrop are on summits, shoulders, and backslopes and cover about 5 percent of this map unit.

Important Soil Properties

Glebe
Available water capacity: Moderate
Depth to bedrock: 20 to 40 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid throughout the soil
Potential frost action: High
Reaction: Extremely acid to strongly acid throughout the soil

Stratton
Available water capacity: Low
Depth to bedrock: 10 to 20 inches
Depth to water table: Greater than 6 feet
Hydrologic Group: C
Permeability: Moderately rapid in the organic layer and moderate or moderately rapid below
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid throughout the soil

Most areas of this map unit are in woodland. This map unit is occasionally used for timber cutting, hiking, skiing, snow-mobiling and hunting. Many miles of the Long Trail/ Appalachian Trail and many alpine ski trails are in this map unit because of its location on high mountain tops.

Red spruce and balsam fir dominate the climax forest community. American beech, and “alpine” paper and yellow birch also occur in the climax forest community.

The ground flora and shrub community consists almost exclusively of abundant mountain maple, mountain ash, hobblebush, spinulose wood fern, Canada mayflower, wood sorrel, clintonia, bunchberry and shining club moss.

This map unit is poorly suited to cultivated crops, hay, and pasture because of steep slopes, stones on the surface and rock outcrops.

This map unit is not recommended for forest management because of the fragile nature of the soils.

This map unit is unsuited for dwellings and septic tank absorption fields because of steep slopes and shallow depth to bedrock.

This map unit is in land capability subclass 7s

923B—Wilmington-Mundal association, undulating, very stony

This map unit consists of nearly level to undulating soils in depressions and drainageways and on footslopes of hills and mountains. Bogs, streams, and beaver ponds and meadows are common in this map unit. Slopes range from 0 to 8 percent, with the Mundal soils on slopes greater than 3 percent. This map unit generally is at elevations of 2,000 to 2,500 feet. Stones cover from 0.1 to 3 percent of the surface. This map unit consists of about 45 percent shallow or moderately deep to dense basal till, very deep to bedrock, poorly drained Wilmington soils; 45 percent moderately deep to dense basal till, very deep to bedrock, moderately well drained Mundal soils; and 10 percent other soils. The Mundal soils are on slightly higher landscape positions than the Wilmington soils.

The typical sequence, depth, and composition of the layers of the Wilmington soils are as follows—

Organic layer:
0 to 2 inch moderately decomposed leaves, needles, and twigs

Surface soil:
2 to 5 inches, black fine sandy loam
5 to 6 inches, dark gray fine sandy loam

Subsoil:
6 to 20 inches, mottled, black fine sandy loam
20 to 26 inches, mottled, dark brown fine sandy loam

Substratum:
26 to 67 inches, mottled, very firm olive gray gravelly fine sandy loam

The typical sequence, depth, and composition of the layers of the Mundal soils are as follows—

Organic layer:
0 to 1 inch, slightly decomposed leaves and twigs
1 to 3 inches, moderately decomposed leaves and twigs

Surface soil:
3 to 6 inches, black fine sandy loam
6 to 7 inches, brown fine sandy loam

Subsoil:
7 to 14 inches, dark brown fine sandy loam
14 to 26 inches, dark brown gravelly fine sandy loam

Substratum:
26 to 68 inches, mottled, very firm light yellowish brown gravelly fine sandy loam

Included with these soils in mapping are very poorly drained Adrian and Carlisle soils, poorly drained Cabot soils and well drained Houghtonville and Rawsonville soils. Adrian, Carlisle, and Cabot soils are in positions similar to Wilmington soils and Houghtonville and Rawsonville soils are on slightly higher convex areas. Included soils make up about 10 percent of the map unit.

Also included are soils with a thinner spodic horizon and small areas with less than 0.1 percent stones on the surface.

Important Soil Properties

Wilmington

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 12 to 24 inches
Depth to water table: At 0 to 1.5 feet below the surface from October to May
Hydrologic group: D
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: High
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Mundal

Available water capacity: Moderate
Depth to bedrock: Greater than 60 inches
Depth to dense material: 20 to 30 inches
Depth to water table: Perched at 1.5 to 2.3 feet below the surface from September to May
Hydrologic group: C
Permeability: Moderately rapid in the organic layer, moderate in the surface soil and subsoil, and moderately slow or slow in the substratum
Potential frost action: Moderate
Reaction: Extremely acid to strongly acid in the organic layer, extremely acid to moderately acid in the surface soil and subsoil, and strongly acid to slightly acid in the substratum

Most areas of this map unit are in woodland. Timber management, wetland habitat management, deer wintering areas and dispersed recreation activities, such as hiking, are common uses of this map unit.

Red spruce and balsam fir are the dominant tree species in the climax forest community. American beech is an associated species. Sugar maple and yellow birch tend to dominate the early successional forest community and persist well into the late successional community. Black cherry is consistently a minor member of the early successional forest community.

Hobblebush, serviceberry, and mountain ash are the dominant shrub species. Common ground flora include clintonia, wild sarsaparilla, wood sorrel, Canada mayflower, sedges, hayscented fern and shining club moss. False hellebore, sphagnum, mosses and pale jewelweed are common in wet areas.

This map unit is poorly suited to cultivated crops, hay, and pasture because of stones on the surface.

The potential productivity for growing sugar maple is low. The woodland management concerns are equipment limitations, seedling mortality, and windthrow. When the soils in this map unit are wet the high organic matter content of the subsoil gives them a greasy characteristic, which sometimes interferes with the operation of logging equipment. In areas of Wilmington soils, the operation of logging equipment is difficult because of the seasonal high water table. Logging operations are more efficiently carried out when the soil is frozen or during dry seasons. In areas of Wilmington soils, the use of water-tolerant planting stock or planting during dryer periods will help minimize seedling mortality during wet spring months. Trees are commonly subject to windthrow, because root growth, is limited by the firm substratum in areas of Mundal and Wilmington soils and the seasonal high water table in areas of Wilmington soils. Even-aged management, strip cutting, patch cutting, and avoiding surface root damage caused by harvesting equipment, helps to minimize windthrow.

This map unit is unsuited for dwellings in areas of poorly drained Wilmington soils. In areas of Mundal soils, the seasonal high water table is the main limitations. Installing footing drains, sealing foundations, and grading the land to divert surface water away from the dwelling will help to prevent wet basements.

This map unit is unsuited for septic tank absorption fields in areas of poorly drained Wilmington soils. In areas of Mundal soils the seasonal high water table and permeability of the substratum are the main limitations. Special construction such as mounding the septic tank absorption field with suitable fill material in most places is needed to raise the field the required distance above the seasonal high water table and the substratum.

This map unit is in land capability subclass 6s

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 8 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in table 5. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

It should be noted that prime farmland is not the same as primary agricultural soils as defined in Vermont's Land Use and Development Law (ACT 250). For more information on the criteria and definitions of prime farmland or primary agricultural soils contact the local office of the Natural Resources Conservation Service.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as woodland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed for each soil in table 6. The system of land capability classification used by the Natural Resources Conservation Service is also explained in this section.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

According to the 1982 Census of Agriculture (USDC, 1982), about 41,281 acres in Bennington County is in farmland. Of this total, about 17,009 acres are used for crops and pasture, including 2,656 acres used for corn, 465 acres used for orchards, and 9,000 acres used for hay.

The grass-legume mixture most commonly used for hay and pasture consists of alfalfa, bromegrass, and timothy. Red clover, alsike clover, redtop, reed canarygrass, and orchardgrass are also grown. Alfalfa grows better on soils that are moderately well drained or well drained than on wet soils. Reed canarygrass and alsike clover are grown on wet soils.

In managing a good stand of perennial pasture plants, using a sound fertilizer program, proper grazing practices, and brush and weed control ensure good growth for a long period. Proper grazing practices include using stocking rates within grazing capacity, using rotational grazing, and deferred grazing during wet periods.

Specialty crops include vegetables, tree fruits, small fruits, and nursery plants. Vegetables, including sweet corn, tomatoes, potatoes, melons, and squash, are grown mainly on flood plains and terraces along the Battenkill and the Hoosic and Walloomsac Rivers, as are small fruits, including strawberries, blueberries, and raspberries. The main tree fruit is apple. Apple orchards are on uplands in the Bennington area (fig. 6).

The very deep, well drained to excessively drained soils that warm up early in the spring, such as the Copake and Windsor soils, are especially well suited to many vegetables and small fruits. On these soils, crops generally can be planted and harvested earlier than on the other soils in the county. However, soils in low-lying landscape positions are generally poorly suited to early vegetables, small fruits, and orchard crops, because of frequent frost and poor air drainage.

The latest information and suggestions for growing crops can be obtained from local offices of the Cooperative Extension Service and the Natural Resources Conservation Service.

On most arable soils, crops respond well to nitrate and phosphate fertilizers and potash. On most soils, periodic applications of lime are needed to raise the pH sufficiently for good growth of alfalfa and other crops that grow well only on slightly acid or neutral soils. On all soils, applications of lime and fertilizers should be based on the results of soil tests, on the needs of the crop, and on expected yield. Information and suggestions on determining the application rate of lime and fertilizers can be obtained from the Cooperative Extension Service.

Soil erosion reduces the productivity of the soil by depleting the surface layer, which contains most of the available plant nutrients and organic matter. Loss of the surface layer is especially damaging on soils that have a dense substratum and those underlain by bedrock. Both of these features limit the depth of the root zone. Peru and Pittstown soils are examples of soils that have a dense substratum. Macomber and

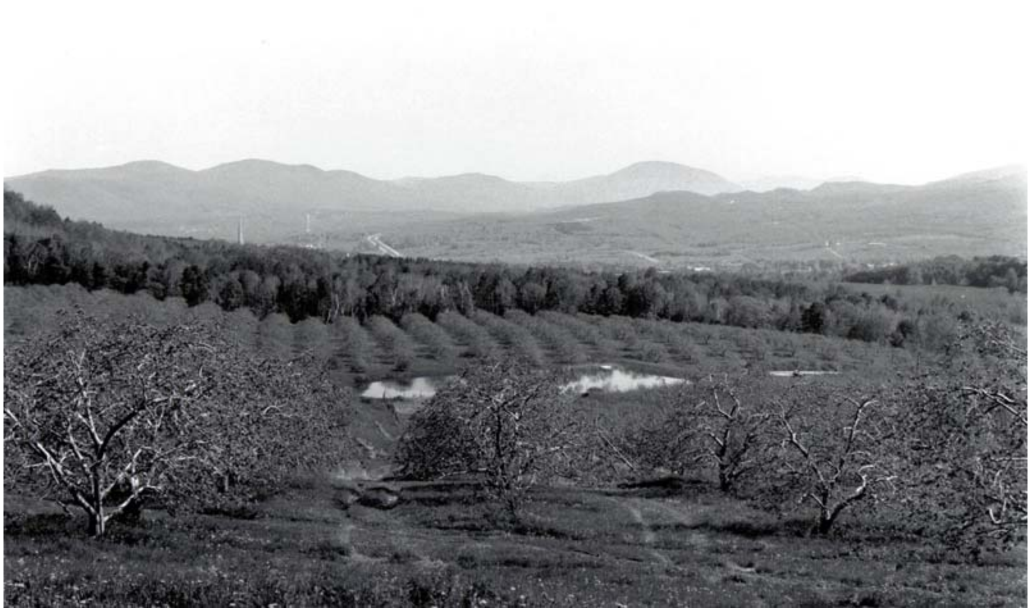

Figure 6.—Apple orchard on Nellis silt loam, 8 to15 percent slopes, Stockbridge loam, 2 to 8 percent slopes, and Stockbridge loam, 15 to 25 percent slopes.

Figure 7.—Streambank stabilization along the Mettawee River protects this cropland from erosion and maintains the water quality of the river. The soil is Hero gravelly fine sandy loam, 0 to 3 percent slopes.

Taconic soils are examples of soils underlain by bedrock within 40 inches of the surface.

Soil erosion on cropland, in many areas, results in the pollution of streams, by sedimentation and by nutrient and pesticide overloading. Controlling erosion minimizes the pollution of streams and maintains water quality for municipal use, recreation, and fish and wildlife (fig. 7).

Erosion control practices provide a protective surface cover, reduce runoff, and increase infiltration. A cropping system that keeps a plant cover on the soil for extended periods helps to control erosion and maintain the productive capacity of the soils. Legume and grass forage crops used in the cropping system help to control erosion, provide nitrogen for other crops, and improve soil tilth.

Stripcropping, or planting alternate strips of row crops and grass crops across the slope, is effective in controlling erosion on soils that have long, uniform slopes (fig. 8). But stripcropping is not practical in areas where soils have short, irregular slopes. In these areas, using a cropping system that includes a cover crop, or using conservation tillage, or both, is required to control erosion.

Diversions intercept water, reduce the length of the slope, and protect fields downslope. Their use is most practical on deep soils that have uniform slopes. For example, diversions are suitable on most areas of Stockbridge, Georgia, and Pittstown soils. Diversions are not suitable on soils that have irregular slopes, that are excessively wet, or those that have bedrock at depths less than 40 inches.

Adequate soil drainage is a management concern on about one-fourth of the acreage used for crops and pasture. Somewhat poorly drained to very poorly drained soils may not be suitable for use as cropland because of a seasonal high water table. Brayton and Massena soils are two examples. Wetland protection regulations must also be taken into consideration if these soils are used for cropland.

Figure 8.—Cropland on Stockbridge loam, 8 to 15 percent slopes, and pasture on Georgia loam, 8 to 15 percent slopes.

Information on erosion control and drainage practices and regulations can be obtained at the local office of the Natural Resources Conservation Service.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 6. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of each map unit also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 6 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for woodland, and for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit. Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by numbers 1 through 8. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are not likely to erode but have other limitations, impractical to remove, that limit their use.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation.

Class 7 soils have very severe limitations that make them unsuitable for cultivation.

Class 8 soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, woodland, wildlife habitat, or recreation.

The capability classification of the map units in this survey area is given in the section “Detailed Soil Map Units” and in the yields table.

Woodland Management and Productivity

James M. White, Bennington County Forester, Vermont Agency of Natural Resources, helped to prepare this section.

About 86 percent of Bennington County is forested. Northern hardwoods, including beech, northern red oak, sugar maple, yellow birch and ash make up about 80 percent of the forested land, with the remaining 20 percent being softwoods, such as white pine, spruce and hemlock. These tree species vary from place to place, depending on soil drainage and soil temperature (fig. 9).

Over 70 percent of the forest land in Bennington County is privately owned. The major portion of public forest land is owned and managed by the USDA Forest Service as part of the Green Mountain National Forest.

Figure 9.—Well-managed woodlot on Berkshire fine sandy loam, 3 to 8 percent slopes, very stony.

The annual commercial harvest of sawlogs in Bennington County is 13 million board feet, with an additional 11 thousand cords of pulpwood. Firewood cutting has accounted for 30,000 cords in the past few years. There are nine sawmills in the county and 15 factories that manufacture furniture and other wood products. There are more than 20 privately employed foresters who live or work primarily in Bennington County.

The average acre of commercial forest land in the county produces 41 cubic feet of wood per year. However, 7 cubic feet are lost annually to cull increment, which is the volume of growth in trees that is too poor in quality to be considered growing stock, leaving a net annual growth of 34 cubic feet. Private and public foresters are needed to bring all forest land under sound management practices. For example, through timber stand improvement, such as thinning and removing poor quality trees, there is a potential to improve the net annual growth by over 40 percent. Because forests are slow growing, woodland management practices used today will have an effect for generations to come. Although the forest is currently producing more than is harvested, in the future the demand for forest products will exceed growth.

The potential for maple syrup production is good for northern hardwood stands that are dominantly mature sugar maple. Many farmers and other landowners earn supplemental income from sugarbush operations.

The forest provides other benefits. It acts like a giant sponge to absorb precipitation and prevents excessive runoff and flooding. The leaf litter covering the forest soils prevents erosion and stream sedimentation. Every municipality in the county relies, at least in part, on a forested watershed for its water supply. Finally, the forests in Bennington County provide opportunities for many recreational activities, including skiing, hiking, snowmobiling, camping, fishing, and hunting.

Table 7 can be used by woodland owners or forest managers in planning the use of soils for wood crops. The Vermont forest value group rates each map unit for producing and harvesting timber (USDA–VT, 1999). Map units in forest value group 1 have a very high potential productivity, forest value group 2 has a high potential productivity, forest value group 3 has a moderate potential productivity, forest value group 4 has a moderately low potential productivity, forest value group 5 has a low potential productivity, and forest value group 6 has a very low potential productivity for producing and harvesting timber. Map units in forest value group 7 have very limited potential for producing and harvesting timber.

The species that is followed by an asterisk under *common trees* is the indicator species used to generate the Vermont forest value group. Sugar maple was used to represent northern hardwoods and eastern white pine was used to represent softwoods. Map units in forest value group 7 have no indicator species under *common trees*.

In the table, *slight, moderate,* and *severe* indicate the degree of the major soil limitations to be considered in management.

Erosion hazard is the probability that damage will occur as a result of site preparation and cutting where the soil is exposed along roads, skid trails, and fire lanes and in log-handling areas. Forests that have been burned or overgrazed are also subject to erosion. Ratings of the erosion hazard are based on the percent of the slope. A rating of *slight* indicates that no particular prevention measures are needed under ordinary conditions. A rating of *moderate* indicates that erosion-control measures are needed in certain silvicultural activities. A rating of *severe* indicates that special precautions are needed to control erosion in most silvicultural activities.

Equipment limitation reflects the characteristics and conditions of the soil that restrict use of the equipment generally needed in woodland management or harvesting. The chief characteristics and conditions considered in the ratings are slope, stones on the surface, rock outcrops, soil wetness, and texture of the surface layer. A rating of *slight* indicates that under normal conditions the kind of equipment and season of use are not significantly restricted by soil factors. Soil wetness can restrict equipment use, but the wet period does not exceed 1 month. A rating of *moderate* indicates that equipment use is moderately restricted because of one or more soil factors. If the soil is wet, the wetness restricts equipment use for a period of 1 to 3 months. A rating of *severe* indicates that equipment use is severely restricted either as to the kind of equipment that can be used or the season of use. If the soil is wet, the wetness restricts equipment use for more than 3 months.

Seedling mortality refers to the death of naturally occurring or planted tree seedlings, as influenced by the kinds of soil, soil wetness, or topographic conditions. The factors used in rating the soils for seedling mortality are texture of the surface layer, depth to a seasonal high water table and the length of the period when the water table is high, rock fragments in the surface layer, effective rooting depth, and slope aspect. A rating of *slight* indicates that seedling mortality is not likely to be a problem under normal conditions. Expected mortality is less than 25 percent. A rating of *moderate* indicates that some problems from seedling mortality can be expected. Extra precautions are advisable. Expected mortality is 25 to 50 percent. A rating of *severe* indicates that seedling mortality is a serious problem. Extra precautions are important. Replanting may be necessary. Expected mortality is more than 50 percent.

Windthrow hazard is the likelihood that trees will be uprooted by the wind because the soil is not deep enough for adequate root anchorage. The main restrictions that affect rooting are a seasonal high water table and the depth to bedrock, a fragipan, or other limiting layers. A rating of *slight* indicates that under normal conditions no trees are blown down by the wind. Strong winds may damage trees, but they do not uproot them. A rating of *moderate* indicates that some trees can be blown down during periods when the soil is wet and winds are moderate or strong. A rating of *severe* indicates that many trees can be blown down during these periods.

The *potential productivity* of merchantable or *common trees* on a soil is expressed as a *site index* and as a *volume* number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability.

The *volume*, a number, is the yield likely to be produced by the most important trees. This number, expressed as cubic feet per acre per year, indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to plant are those that are suitable for commercial wood production.

Recreation

Historically, recreation in Bennington County has been confined to the warmer seasons. The dramatic physical features of the county have attracted tourists and summer residents for more than a century. Manchester, for example, became famous as a resort during President Lincoln's time in office. But while stately summer homes still populate the valleys from Bennington to Dorset, recreation in the county has become a four-season activity.

Favorable topography, the proximity of large urban markets, the completion of the interstate highways, and the evolution of artificial snowmaking has led to the development of several downhill ski areas in the county and many others nearby. There are also several cross-country ski areas in the county. The network of snowmobile trails that run throughout the county sees heavy use in the winter months, as well.

In the fall, hunting and foliage tours are popular pastimes.

Of course, many recreational opportunities still exist during the summer months. There are six golf courses in the county. There is excellent trout fishing and canoeing on the Battenkill and other rivers and streams. There is hiking on the Appalachian Trail–Long Trail and other trails, and there is camping in the Green Mountain National Forest and at several state parks, in addition to swimming and picnicking.

The soils of the survey area are rated in table 8 according to limitations that affect their suitability for recreation. The ratings are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation are also important. Soils subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

In the table, the degree of soil limitation is expressed as slight, moderate, or severe. *Slight* means that soil properties are generally favorable and that limitations are minor and easily overcome. *Moderate* means that limitations can be overcome or alleviated by planning, design, or special maintenance. *Severe* means that soil properties are unfavorable and that limitations can be offset only by costly soil reclamation, special design, intensive maintenance, limited use, or a combination of these measures.

The information in the table can be supplemented by other information in this survey, for example, interpretations for septic tank absorption fields in table 11 and interpretations for dwellings without basements and for local roads and streets in table 10.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The best soils have mild slopes and are not wet or subject to flooding during the period of use. The surface has few or no stones or boulders, absorbs rainfall readily but remains firm, and is not dusty when dry. Strong slopes and stones or boulders can greatly increase the cost of constructing campsites.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The best soils for picnic areas are firm when wet, are not dusty when dry, are not subject to flooding during the period of use, and do not have slopes or stones or boulders that increase the cost of shaping sites or of building access roads and parking areas.

Playgrounds require soils that can withstand intensive foot traffic. The best soils are almost level and are not wet or subject to flooding during the season of use. The surface is free of stones and boulders, is firm after rains, and is not dusty when dry. If grading is needed, the depth of the soil over bedrock or a hardpan should be considered.

Paths and trails for hiking and horseback riding should require little or no cutting and filling. The best soils are not wet, are firm after rains, are not dusty when dry, and are not subject to flooding more than once a year during the period of use. They have moderate slopes and few or no stones or boulders on the surface.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. The best soils for use as golf fairways are firm when wet, are not dusty when dry, and are not subject to prolonged flooding during the period of use. They have moderate slopes and no stones or boulders on the surface. The suitability of the soil for tees or greens is not considered in rating the soils.

Wildlife Habitat

Bennington County is host to a wide variety of wildlife. The combination of large forested tracts and open farmland provides suitable habitat for a substantial number of species, including deer, bear, turkey, coyote, fox, rabbit, snowshoe hare, beaver, raptors and numerous small mammals and songbirds.

Much of the lowland valleys are in active dairy farms, interspersed with forested areas. These varying land uses provide critical “edge” habitat. Along with small areas of recently abandoned farmland, they supply an important and productive early successional forest type, which provides excellent habitat for ruffed grouse, woodcock, turkey, deer, fox, cottontail, raptors and large numbers of small mammals and birdlife.

Black bear inhabit more remote, mountainous areas of the county, especially those areas that support stands of beech, cherry, oak, and other mast-producing tree species. These trees are also an important food source for wildlife such as grouse, turkey, deer, and small mammals. The mountainous areas are home to the snowshoe hare, who are well-equipped to handle the deep winter snows. Moose are making a comeback in these remote areas, as well.

Bennington County has about 12,000 acres of deer wintering areas and about 20,000 acres of wetlands, ponds, and lakes, which provide habitat for beaver, otter, mink, muskrat, and a variety of nesting and migratory waterfowl (fig. 10). The importance of these specialized habitats to wildlife far outweighs their relative scarcity in the county.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 9, the soils in the survey area are rated according to their potential for

Figure 10.—This area of shallow water in the Wilmington-Mundal association, undulating, very stony, provides important habitat for wetland wildlife.

providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture are also considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture are also considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture are also considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian-olive, autumn-olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, cedar, and juniper.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, wildrice, saltgrass, cordgrass, rushes, sedges, and reeds.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous plants or coniferous plants or both and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, deer, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the “Soil Properties” section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil within a depth of 5 or 6 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 or 6 feet of the surface, soil wetness, depth to a seasonal high water table, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Table 10 shows the degree and kind of soil limitations that affect shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. Special feasibility studies may be required where the soil limitations are severe.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for basements, graves, utility lines, open ditches, and other purposes. The ratings are based on soil properties, site features, and observed performance of the soils. The ease of digging, filling, and compacting is affected by the depth to bedrock, a cemented pan, or a very firm dense layer; stone content; soil texture; and slope. The time of the year that excavations can be made is affected by the depth to a seasonal high water table and the susceptibility of the soil to flooding. The resistance of the excavation walls or banks to sloughing or caving is affected by soil texture and depth to the water table.

Dwellings and *small commercial buildings* are structures built on shallow foundations on undisturbed soil. The load limit is the same as that for single-family dwellings no higher than three stories. Ratings are made for small commercial buildings without basements, for dwellings with basements, and for dwellings without basements. The ratings are based on soil properties, site features, and observed performance of the soils. A high water table, flooding, shrinking and swelling, and organic layers can cause the movement of footings. A high water table, depth to bedrock or to a cemented pan, large stones, slope, and flooding affect the ease of excavation and construction. Landscaping and grading that require cuts and fills of more than 5 or 6 feet are not considered.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or stabilized soil material; and a flexible or rigid surface. Cuts and fills are generally limited to less than 6 feet. The ratings are based on soil properties, site features, and observed performance of the soils. Depth to bedrock or to a cemented pan, a high water table, flooding, large stones, and slope affect the ease of excavating and grading. Soil strength (as inferred from the engineering classification of the soil), shrink-swell potential, frost action potential, and depth to a high water table affect the traffic-supporting capacity.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. The ratings are based on soil properties, site features, and observed performance of the soils. Soil reaction, a high water table, depth to bedrock or to a cemented pan, the available water capacity in the upper 40 inches, and the content of salts, sodium, and sulfidic materials affect plant growth. Flooding, wetness, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer affect trafficability after vegetation is established.

Sanitary Facilities

Table 11 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, and sanitary landfills. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required.

The table also shows the suitability of the soils for use as daily cover for landfill. A rating of *good* indicates that soil properties and site features are favorable for the use and good performance and low maintenance can be expected; *fair* indicates that soil properties and site features are moderately favorable for the use and one or more soil properties or site features make the soil less desirable than the soils rated good; and *poor* indicates that one or more soil properties or site features are unfavorable for the use and overcoming the unfavorable properties requires special design, extra maintenance, or costly alteration.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches is evaluated. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, a high water table, depth to bedrock or to a cemented pan, and flooding affect absorption of the effluent. Large stones and bedrock or a cemented pan interfere with installation.

Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health. Ground water can be polluted if highly permeable sand and gravel or fractured bedrock is less than 4 feet below the base of the absorption field, if slope is excessive, or if the water table is near the surface. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Many local ordinances require that this material be of a certain thickness.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Lagoons generally are designed to hold the sewage within a depth of 2 to 5 feet. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water.

The table gives ratings for the natural soil that makes up the lagoon floor. The surface layer and, generally, 1 or 2 feet of soil material below the surface layer are excavated to provide material for the embankments. The ratings are based on soil properties, site features, and observed performance of the soils. Considered in the ratings are slope, permeability, a high water table, depth to bedrock or to a cemented pan, flooding, large stones, and content of organic matter.

Excessive seepage resulting from rapid permeability in the soil or a water table that is high enough to raise the level of sewage in the lagoon causes a lagoon to function unsatisfactorily. Pollution results if seepage is excessive or if floodwater overtops the lagoon. A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor.

Sanitary landfills are areas where solid waste is disposed of by burying it in soil. There are two types of landfill—trench and area. In a trench landfill, the waste is placed in a trench. It is spread, compacted, and covered daily with a thin layer of soil excavated at the site. In an area landfill, the waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site.

Both types of landfill must be able to bear heavy vehicular traffic. Both types involve a risk of ground-water pollution. Ease of excavation and revegetation should be considered.

The ratings in the table are based on soil properties, site features, and observed performance of the soils. Permeability, depth to bedrock or to a cemented pan, a high water table, slope, and flooding affect both types of landfill. Texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium affect trench landfills. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, a limitation rated slight or moderate may not be valid. Onsite investigation is needed.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste.

Soil texture, wetness, coarse fragments, and slope affect the ease of removing and spreading the material during wet and dry periods. Loamy or silty soils that are free of large stones or excess gravel are the best cover for a landfill. Clayey soils are sticky or cloddy and are difficult to spread; sandy soils are subject to wind erosion.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. The surface layer generally has the best workability, more organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

Construction Materials

Table 12 gives information about the soils as a source of roadfill, sand, gravel, and topsoil. The soils are rated *good, fair,* or *poor* as a source of roadfill and topsoil. They are rated as a *probable* or *improbable* source of sand and gravel. The ratings are based on soil properties and site features that affect the removal of the soil and its use as construction material. Normal compaction, minor processing, and other standard construction practices are assumed. Each soil is evaluated to a depth of 5 or 6 feet.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the soil material below the surface layer to a depth of 5 or 6 feet. It is assumed that soil layers will be mixed during excavating and spreading. Many soils have layers of contrasting suitability within their profile. The table showing engineering index properties provides detailed information about each soil layer. This information can help to determine the suitability of each layer for use as roadfill. The performance of soil after it is stabilized with lime or cement is not considered in the ratings.

The ratings are based on soil properties, site features, and observed performance of the soils. The thickness of suitable material is a major consideration. The ease of excavation is affected by large stones, a high water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the engineering classification of the soil) and shrink-swell potential.

Soils rated *good* contain significant amounts of sand or gravel or both. They have at least 5 feet of suitable material, a low shrink-swell potential, few cobbles and stones, and slopes of 15 percent or less. Depth to the water table is more than 3 feet. Soils rated *fair* are more than 35 percent silt- and clay-sized particles and have a plasticity index of less than 10. They have a moderate shrink-swell potential, slopes of 15 to 25 percent, or many stones. Depth to the water table is 1 to 3 feet. Soils rated *poor* have a plasticity index of more than 10, a high shrink-swell potential, many stones, or slopes of more than 25 percent. They are wet and have a water table at a depth of less than 1 foot. They may have layers of suitable material, but the material is less than 3 feet thick.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material.

The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the engineering classification of the soil), the thickness of suitable material, and the content of rock fragments. Kinds of rock, acidity, and stratification are given in the soil series descriptions. Gradation of grain sizes is given in the table on engineering index properties.

A soil rated as a probable source has a layer of clean sand or gravel or a layer of sand or gravel that is up to 12 percent silty fines. This material must be at least 3 feet thick and less than 50 percent, by weight, large stones. All other soils are rated as an improbable source. Coarse fragments of soft bedrock, such as shale and siltstone, are not considered to be sand and gravel.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area.

Plant growth is affected by toxic material and by such properties as soil reaction, available water capacity, and fertility. The ease of excavating, loading, and spreading is affected by rock fragments, slope, a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, a water table, rock fragments, bedrock, and toxic material.

Soils rated *good* have friable, loamy material to a depth of at least 40 inches. They are free of stones and cobbles, have little or no gravel, and have slopes of less than 8 percent. They are low in content of soluble salts, are naturally fertile or respond well to fertilizer, and are not so wet that excavation is difficult.

Soils rated *fair* are sandy soils, loamy soils that have a relatively high content of clay, soils that have only 20 to 40 inches of suitable material, soils that have an appreciable amount of gravel, stones, or soluble salts, or soils that have slopes of 8 to 15 percent. The soils are not so wet that excavation is difficult.

Soils rated *poor* are very sandy or clayey, have less than 20 inches of suitable material, have a large amount of gravel, stones, or soluble salts, have slopes of more than 15 percent, or have a seasonal high water table at or near the surface.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (USDA, 1999) and “Keys to Soil Taxonomy” (USDA, 1998) and in the “Soil Survey Manual” (USDA, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

The following map units meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1996).

21A	Limerick silt loam, 0 to 3 percent slopes
23A	Adrian and saco soils, 0 to 2 percent slopes
24A	Carlisle mucky peat, 0 to 2 percent slopes
26A	Raynham silt loam, 0 to 3 percent slopes
50B	Brayton loam, 0 to 5 percent slopes
51B	Brayton loam, 0 to 5 percent slopes, very stony
52A	Mansfield mucky silt loam, 0 to 3 percent slopes, very stony
100B	Wilmington fine sandy loam, 0 to 8 percent slopes, very stony
403B	Cabot-carlisle association, undulating, very stony
413D	Peru-berkshire-cabot association, hilly, very stony
903C	Mundal-wilmington association, rolling, very stony
923B	Wilmington-mundal association, undulating, very stony

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The following map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

25B	Belgrade silt loam, 0 to 8 percent slopes
29A	Occum fine sandy loam, 0 to 3 percent slopes
34A	Pootatuck fine sandy loam, 0 to 3 percent slopes
44B	Dutchess channery loam, 3 to 8 percent slopes
44C	Dutchess channery loam, 8 to 15 percent slopes
44D	Dutchess channery loam, 15 to 25 percent slopes
47C	Dutchess channery loam, 8 to 15 percent slopes, very stony
47D	Dutchess channery loam, 15 to 25 percent slopes, very stony
47E	Dutchess channery loam, 25 to 60 percent slopes, very stony
48B	Pittstown loam, 3 to 8 percent slopes
48C	Pittstown loam, 8 to 15 percent slopes
48D	Pittstown loam, 15 to 25 percent slopes
49C	Pittstown loam, 8 to 15 percent slopes, very stony
49D	Pittstown loam, 15 to 25 percent slopes, very stony
68A	Massena silt loam, 0 to 3 percent slopes
68B	Massena silt loam, 3 to 8 percent slopes
69A	Massena silt loam, 0 to 3 percent slopes, very stony
69B	Massena silt loam, 3 to 8 percent slopes, very stony
72A	Fredon fine sandy loam, 0 to 3 percent slopes
102B	Mundal fine sandy loam, 3 to 8 percent slopes
102C	Mundal fine sandy loam, 8 to 15 percent slopes
108B	Peru fine sandy loam, 3 to 8 percent slopes, very stony
108C	Peru fine sandy loam, 8 to 15 percent slopes, very stony
108D	Peru fine sandy loam, 15 to 25 percent slopes, very stony
113B	Cabot silt loam, 3 to 8 percent slopes, very stony

114B Mundal fine sandy loam, 3 to 8 percent slopes, very stony
114C Mundal fine sandy loam, 8 to 15 percent slopes, very stony
114D Mundal fine sandy loam, 15 to 25 percent slopes, very stony
115B Peru fine sandy loam, 3 to 8 percent slopes
115C Peru fine sandy loam, 8 to 15 percent slopes
115D Peru fine sandy loam, 15 to 25 percent slopes
405D Berkshire-Tunbridge association, hilly, very stony
703C Mundal-Houghtonville association, rolling, very stony
705D Rawsonville-Houghtonville-Mundal association, hilly, rocky
715D Houghtonville-Rawsonville association, hilly, rocky
905D Houghtonville-Monadnock association, hilly, very stony

Water Management

Table 13 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and are easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increase in construction costs, and possibly increased maintenance are required.

This table also gives for each soil the restrictive features that affect drainage, irrigation, terraces and diversions, and grassed waterways.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, to a cemented pan, or to other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and the potential for frost action. Excavating and grading and the stability of ditchbanks are affected by depth to bedrock or to a cemented pan, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage is adversely affected by extreme acidity or by toxic substances in the root zone, such as salts, sodium, and sulfur. Availability of drainage outlets is not considered in the ratings.

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock or to a cemented pan. The performance of a system is affected by the depth of the root zone, the amount of salts or sodium, and soil reaction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to control erosion and conserve moisture by intercepting runoff. Slope, wetness, large stones, and depth to bedrock or to a cemented pan affect the construction of terraces and diversions. A restricted rooting depth, a severe hazard of wind erosion or water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Grassed waterways are natural or constructed channels, generally broad and shallow, that conduct surface water to outlets at a nonerosive velocity. Large stones, wetness, slope, and depth to bedrock or to a cemented pan affect the construction of grassed waterways. A hazard of wind erosion, low available water capacity, restricted rooting depth, toxic substances such as salts and sodium, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features, listed in tables, are explained on the following pages.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine grain-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classification, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 14 gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under the heading “Soil Series and Their Morphology.”

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is as much as about 15 percent, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM 1998) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO 1998).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of grain-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is omitted in the table.

Physical and Chemical Properties

Table 15 shows estimates of some physical and chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In table 15, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In table 15, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 15, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time. The available water capacity for each map unit is calculated to a depth of 60 inches, to bedrock, or to a densic contact. A representative value of each layer is multiplied by thickness of the layer to give a representative available water capacity value in inches per inch per layer. The values for each layer are summed to give a value for the soil. A representaive value of 0 to 3 is very low available water capacity, 3 to 6 is low, 6 to 9 is moderate, 9 to 12 is high, and greater than 12 is very high.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 15, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 15 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Soil Features

Table 16 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Table 17 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 17 indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 17 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (USDA 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 18 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Eleven soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Spodosol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Orthod (*Orth*, meaning true, plus *od*, from Spodosol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Haplorthod (*Hapl*, meaning minimal horizonation, plus *orthod*, the suborder of the Spodisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Haplorthods.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is coarse-loamy, mixed, frigid Typic Haplorthods.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (USDA 1993). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (USDA 1999) and in “Keys to Soil Taxonomy” (USDA 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units of each soil series are described in the section “Detailed Soil Map Units.”

Adrian Series

The Adrian series consists of very deep, very poorly drained soils. The soils formed in organic deposits underlain by sandy glaciofluvial deposits in marshes and swamps. Slopes range from 0 to 2 percent.

Adrian soils, in most places, are near Cabot, Carlisle, Limerick, and Saco soils. Adrian soils have organic materials to a depth of 16 to 50 inches that are not in Cabot, Limerick, and Saco soils. Adrian soils have mineral soil materials within a depth of 16 to 50 inches that are not in Carlisle soils. Adrian soils are mapped only in an undifferentiated unit with Saco soils in the survey area.

Typical pedon of Adrian muck, in an area of Adrian and Saco soils, 0 to 2 percent slopes, in a swamp, approximately 187 feet northeast of the junction of Main St. and Landgrove Road and 553 feet north of the junction of Vermont Route 11 and Winhall Hollow Road, in the town of Peru, lat. 43 degrees 13 minutes and 49.7 seconds N. and long. 72 degrees, 53 minutes, 54.6 seconds W., NAD 184:

Oi—0 to 2 inches; Sphagnum moss, leaves, needles and twigs.

Oa1—2 to 8 inches; black (10YR 2/1) broken face and rubbed muck (sapric material); about 25 percent fibers, 14 percent rubbed; massive; very friable; many very fine and common fine roots; moderately acid; abrupt wavy boundary.

Oa2—8 to 20 inches; black (7.5YR 2.5/1) broken face and rubbed muck (sapric material); about 30 percent fiber, 15 percent rubbed; massive; very friable; common fine and few medium roots; slightly acid; clear smooth boundary.

Oa3—20 to 35 inches; very dark gray (5YR 3/1) broken face, dark brown (7.5YR 3/2) rubbed muck (sapric material); about 35 percent fiber, 15 percent rubbed; massive; very friable; slightly acid; abrupt wavy boundary.

C—35 to 65 inches; gray (5Y 5/1) loamy sand; massive; friable; 10 percent rock fragments; neutral.

The depth to bedrock is more than 60 inches. The O horizons are 16 to 51 inches thick. Reaction is extremely acid to neutral in the O horizons and moderately acid to moderately alkaline in the C horizon.

The surface tier is neutral or has hue of 7.5YR or 10YR, value of 2, and chroma of 0 to 3. The material is dominantly muck, but layers of mucky peat are present in some pedons.

The subsurface and bottom tiers are neutral or have hue of 5YR to 10YR, value of 2 to 3, and chroma of 0 to 2. The material is mostly muck, but thin layers of mucky peat, and peat are present in some pedons.

The C horizon is neutral or has hue of 5YR to 5Y, value of 2 to 6, and chroma of 0 to 3. Texture is loamy sand, sand, or their gravelly analogs. Rock fragments range from 0 to 25 percent.

Amenia Series

The Amenia series consists of very deep, moderately well drained soils. They formed in calcareous, loamy till on knolls, hills, and ridges. Slopes range from 0 to 15 percent.

Amenia soils, in most places, are near Farmington, Galway, Georgia, Massena and Nellis soils. Amenia soils are deeper to bedrock than shallow Farmington soils and moderately deep Galway soils. Amenia soils have carbonates within a depth of 40 inches that are not in Georgia soils. Amenia soils do not have redoximorphic features in the upper part of the subsoil that are in Massena soils. Amenia soils have redoximorphic features in the subsoil that are not in Nellis soils.

Typical pedon of Amenia silt loam, 3 to 8 percent slopes, very stony, in woodland, approximately 1,255 feet south-southeast of the junction of Bart Hill and Buck Hill roads and 1,665 feet east of Warm Brook, in the town of Shaftsbury, lat. 43 degrees 00 minutes 33.6 seconds N. and long. 73 degrees 09 minutes 48.1 seconds W., NAD 1984:

Oi1—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 7 inches; dark brown (10YR 3/3) silt loam; weak fine granular structure; friable; many fine and medium roots; 10 percent rock fragments; neutral; abrupt smooth boundary.

Bw1—7 to 16 inches; dark yellowish brown (10YR 4/4) silt loam; weak fine subangular blocky structure; friable; many fine and medium roots; 10 percent rock fragments; neutral; abrupt wavy boundary.

Bw2—16 to 25 inches; olive brown (2.5Y 4/4) silt loam; weak fine subangular blocky structure; friable; few fine roots; common fine distinct olive gray (5Y 4/2) and dark grayish brown (2.5Y 4/2) iron depletions and common fine faint olive (5Y 4/3) masses of iron accumulation; 10 percent rock fragments; neutral; abrupt wavy boundary.

C—25 to 67 inches; light olive brown (2.5Y 5/3) gravelly fine sandy loam; massive; firm; common medium prominent yellowish brown (10YR 5/6) and common medium distinct brown (7.5YR 4/4) masses of iron accumulation and common medium faint olive gray (5Y 4/2) iron depletions; 25 percent rock fragments; strong effervescence; slightly alkaline.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 36 inches and depth to carbonates ranges from 10 to 34 inches. Rock fragments range from 5 to 34 percent. Reaction is moderately acid to slightly alkaline in the A and B horizons and slightly alkaline to moderately alkaline in the C horizon. The O horizon, where present, is extremely acid to strongly acid.

The A horizon has hue of 10YR, value of 2 or 3, and chroma of 2 or 3. Texture is silt loam, loam, fine sandy loam, or their gravelly analogs.

The Bw horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 to 6, with chroma of 2 at depths greater than 20 inches. Texture is silt loam, loam, fine sandy loam, or their gravelly analogs.

The C horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 or 3. Texture is silt loam, loam, fine sandy loam, or their gravelly analogs.

Belgrade Series

The Belgrade series consists of very deep, moderately well drained soils. They formed in silty deposits on terraces and knolls. Slopes range from 0 to 8 percent.

Belgrade soils, in most places, are near Copake, Hartland, Raynham, and Windsor soils. Belgrade soils have less sand in the substratum than Copake and Windsor soils. Belgrade soils have redoximorphic features in the subsoil that are not in Hartland soils. Belgrade soils do not have redoximorphic features in the upper part of the subsoil that are in Raynham soils.

Typical pedon of Belgrade silt loam, 0 to 8 percent slopes, in hayland, approximately 192 feet east of US Route 7 and 3,335 feet north of Fuller Road, in the town of Bennington, lat. 42 degrees 51 minute 34.1 seconds N. and long. 73 degrees 11 minutes 58.8 seconds W., NAD 1984:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam; moderate fine granular structure; very friable; many fine and medium roots; neutral; abrupt smooth boundary.

Bw1—9 to 15 inches; dark yellowish brown (10YR 4/4) silt loam; weak medium and coarse platy structure; friable; few fine roots; neutral; abrupt wavy boundary.

Bw2—15 to 21 inches; olive brown (2.5Y 4/4) silt loam; massive; friable; few fine roots; many fine distinct dark grayish brown (2.5Y 4/2) iron depletions in the lower part; neutral; abrupt wavy boundary.

C—21 to 65 inches; light olive brown (2.5Y 5/4) silt loam; massive; friable; many fine distinct dark grayish brown (2.5Y 4/2) iron depletions and many medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 0 to 5 percent. Reaction is very strongly acid to neutral in the A and B horizons and slightly acid to slightly alkaline in the C horizon.

The Ap horizon has hue of 10YR, value of 3 or 4, and chroma of 2 to 4. It is silt loam or very fine sandy loam.

The Bw horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 4 to 6 in the upper part and 2 to 6 in the lower part. Texture is silt loam or very fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 to 4. Texture is silt loam or very fine sandy loam. Some pedons have thin strata of silt, loamy fine sand, or fine sand. Below a depth of 40 inches, some pedons have thin strata of sand or gravel.

Berkshire Series

The Berkshire series consists of very deep, well drained soils. They formed in loamy till on knolls, hills, ridges, and mountains. Slopes range from 3 to 70 percent.

Berkshire soils, in most places, are near Cabot, Colton, Lyman, Monadnock, Peru, and Tunbridge soils. Berkshire soils do not have redoximorphic features in the subsoil that are in Cabot soils. Berkshire soils do not have redoximorphic features in the dense substratum that is in Peru soils. Berkshire soils are deeper to bedrock than shallow Lyman soils and moderately deep Tunbridge soils. Berkshire soils have less sand in the substratum than Colton and Monadnock soils. Berkshire soils are mapped as consociations, in complexes with Tunbridge soils, and in associations with Cabot, Peru, and Tunbridge soils in the survey area.

Typical pedon of Berkshire fine sandy loam, 25 to 50 percent slopes, very stony, in woodland, approximately 1,330 feet east of Vermont Route 8 and 8,870 feet north of the power line, in the town of Stamford lat. 42 degrees 47 minutes 42.7 seconds N. and long. 73 degrees 01 minutes 24.7 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves, needles and twigs.

A—1 to 4 inches; black (10YR 2/1) fine sandy loam; weak fine granular structure; very friable; many very fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

E—4 to 6 inches; grayish brown (10YR 5/2) gravelly fine sandy loam; weak medium subangular blocky structure; very friable; many fine and common medium roots; 15 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bs1—6 to 12 inches; brown (7.5YR 4/4) gravelly fine sandy loam; weak medium subangular blocky structure; friable; many fine and common medium roots; 20 percent rock fragments; strongly acid; clear smooth boundary.

Bs2—12 to 17 inches; dark yellowish brown (10YR 4/6) gravelly fine sandy loam;

weak medium subangular blocky structure; friable; many fine and few coarse roots; 25 percent rock fragments; strongly acid; clear smooth boundary.

BC—17 to 31 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; 30 percent rock fragments; strongly acid; gradual smooth boundary.

C—31 to 66 inches; light olive brown (2.5Y 5/4) gravelly fine sandy loam; massive; friable; 30 percent rock fragments strongly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 16 to 36 inches. Rock fragments range from 10 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A horizon is neutral or has hue of 5YR to 10YR, value of 2 or 3, and chroma of 0 to 3. Texture is loam, fine sandy loam, sandy loam, or their gravelly analogs.

The E horizon is neutral or has hue of 5YR to 10YR, value of 4 to 6, and chroma of 0 to 2. Texture is loam, fine sandy loam, sandy loam, or their gravelly analogs.

The Bs horizon has hue of 5YR to 10YR, value of 3 to 5, and chroma of 3 to 6.

The Bhs or Bh horizons, where present, are less than 4 inches thick with hue of 5YR or 7.5YR, value of 2 or 3, and chroma of 1 to 3. The combined thickness of the Bh, Bhs and Bs horizons is 16 inches or less.

The BC horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4.

Texture of the Bh, Bhs, Bs, and BC horizons is loam, fine sandy loam, sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4. Texture is loam, fine sandy loam, sandy loam, or their gravelly analogs.

Brayton Series

The Brayton series consists of poorly drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till in depressions and drainageways and on toe slopes and foot slopes of hills and ridges. Slopes range from 0 to 5 percent.

Brayton soils, in most places, are near Dutchess, Macomber, Mansfield, Pittstown, and Taconic soils. Brayton soils have redoximorphic features in the upper part of the subsoil that are not in Dutchess and Pittstown soils. Brayton soils are deeper to bedrock than moderately deep Macomber soils and shallow Taconic soils. Brayton soils have less organic matter in the surface layer than Mansfield soils.

Typical pedon of Brayton loam, 0 to 5 percent slopes, very stony, in woodland, approximately 1,015 feet west of West Road and 6,125 feet north of West Sandgate Road, in the town of Sandgate lat. 43 degrees 10 minutes 37.7 seconds N. and long. 73 degrees 01 minutes 24.7 seconds W., NAD 1984:

Oe—0 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 8 inches; very dark grayish brown (10YR 3/2) loam; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; moderately acid; abrupt wavy boundary.

Bw—8 to 10 inches; olive (5Y 4/3) silt loam; weak fine subangular blocky structure; friable; common fine and medium roots; 5 percent rock fragments; moderately acid; clear smooth boundary.

Bg—10 to 17 inches; olive gray (5Y 4/2) silt loam; weak fine subangular blocky structure; friable; few fine roots; common medium prominent brown (7.5YR 4/4) and strong brown (7.5YR 5/6) masses of iron accumulation; 10 percent rock fragments; moderately acid; abrupt wavy boundary.

Cdg—17 to 67 inches; dark gray (5Y 4/1) silt loam; massive; very firm; common fine and medium prominent brown (7.5YR 4/4), strong brown (7.5YR 5/6), and yellowish brown (10YR 5/6) masses of iron accumulation and common fine and medium distinct very dark grayish brown (10YR 3/2) iron depletions; 10 percent rock fragments; moderately acid.

The depth to bedrock is more than 60 inches. The thickness of the solum and depth to dense basal till range from 10 to 25 inches. Rock fragments range from 5 to 20 percent in the A and B horizons and 10 to 25 percent in the C horizon. Reaction is extremely acid to strongly acid in the O horizon, extremely acid to moderately acid in the A horizon, strongly acid to slightly acid in the B horizon, and moderately acid to neutral in the C horizon..

The A horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 4. Texture is silt loam, loam, fine sandy loam or their channery analogs.

The B horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 to 4, with at least one subhorizon having a chroma of 2 or less. Texture is silt loam, loam, fine sandy loam or their channery analogs.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 1 to 4. Texture is silt loam, loam, fine sandy loam or their channery analogs.

Cabot Series

The Cabot series consists of poorly drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till in depressions and drainageways and on toe slopes and foot slopes of hills, ridges, and mountains. Slopes range from 0 to 15 percent.

Cabot soils, in most places, are near Adrian, Berkshire, Carlisle, and Peru soils. Cabot soils do not have organic materials to a depth of 16 inches or more that are in Adrian and Carlisle soils. Cabot soils have redoximorphic features in the subsoil that are not in Berkshire and Peru soils. Cabot soils are mapped as consociations and in associations with Berkshire, Carlisle, and Peru soils in the survey area.

Typical pedon of Cabot silt loam, 3 to 8 percent slopes, very stony, in woodland, approximately 4,480 feet east of the junction of Vermont Routes 11 and 30, 655 feet south of Vermont Route 11, in the town of Winhall lat. 43 degrees 12 minutes 19.3 seconds N. and long. 72 degrees 56 minutes 36.8 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves, needles and twigs.

A—1 to 9 inches; black (10YR 2/1) silt loam; weak fine granular structure; friable; common fine roots; 5 percent rock fragments; strongly acid; abrupt smooth boundary.

Bg—9 to 15 inches; olive gray (5Y 5/2) silt loam; weak fine subangular blocky structure; friable; few fine roots; common medium prominent brown (7.5YR 4/4) and common medium distinct light olive brown (2.5Y 5/4) masses of iron accumulation; 5 percent rock fragments; moderately acid; clear smooth boundary.

Cdg1—15 to 26 inches; greenish gray (5GY 5/1) fine sandy loam; massive; firm; common medium prominent brown (7.5YR 4/4) and dark reddish brown (5YR 3/3) masses of iron accumulation; 10 percent rock fragments; moderately acid; clear smooth boundary.

Cdg2—26 to 37 inches; olive gray (5Y 4/2) fine sandy loam; massive; firm; common medium and coarse prominent brown (7.5YR 4/4) masses of iron accumulation; 10 percent rock fragments; moderately acid; clear smooth boundary.

Cdg3—37 to 66 inches; dark olive gray (5Y 3/2) fine sandy loam; massive; firm; common medium and coarse prominent brown (7.5YR 4/4), reddish brown (2.5YR 4/4) and dark yellowish brown (10YR 4/4) masses of iron accumulation; 10 percent rock fragments; moderately acid.

The depth to bedrock is more than 60 inches. The thickness solum and depth to dense basal till range from 12 to 24 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon, strongly acid to neutral in the A and B horizons, and moderately acid to slightly alkaline in the C horizon.

The A horizon has hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2. Texture is silt loam, fine sandy loam or their gravelly analogs.

The Bg horizon has hue of 10YR to 5Y, or 5GY, value of 2 to 5, and chroma of 1 or 2. Texture is silt loam, fine sandy loam or their gravelly analogs.

The Cdg horizon has hue of 2.5Y, 5Y or 5GY,, value of 3 to 5, and chroma of 1 to 4. Texture is silt loam, fine sandy loam, loam or their gravelly analogs.

Carlisle Series

The Carlisle series consists of very deep, very poorly drained soils. They formed in organic deposits in marshes and swamps. Slopes range from 0 to 2 percent.

Carlisle soils, in most places, are near Adrian, Cabot, Peru and Saco soils. Carlisle soils have organic materials to a depth of more than 51 inches that are not in Adrian, Cabot, Peru and Saco soils. Carlisle soils are mapped as consociations and in associations with Cabot soils in the survey area.

Typical pedon of Carlisle mucky peat, 0 to 2 percent slopes, in woodland, approximately 660 feet east of Landgrove Road and 5,910 feet north of Vermont Route 11, in the town of Peru lat. 43 degrees 15 minutes 03.7 seconds N. and long. 72 degrees 53 minutes 14.6 seconds W., NAD 1984:

Oi—0 to 1 inch; Sphagnum moss, leaves, needles and twigs.

Oe—1 to 4 inches; black (5YR 2.5/1) broken face and rubbed mucky peat (hemic material); about 60 percent fibers, 36 percent rubbed, 5 percent mineral; weak coarse granular structure; very friable; many very fine and fine roots; strongly acid; abrupt wavy boundary.

Oa1—4 to 10 inches; dark reddish brown (5YR 2.5/2) broken face, black (5YR 2.5/1) rubbed muck (sapric material); about 35 percent fibers, 15 percent rubbed; massive; very friable; many very fine and fine roots; strongly acid; abrupt wavy boundary.

Oa2—10 to 31 inches; dark reddish brown (5YR 2.5/2) broken face, black (5YR 2.5/1) rubbed muck (sapric material); about 35 percent fiber, 15 percent rubbed; massive; very friable; very strongly acid; abrupt wavy boundary.

Oa3—31 to 43 inches; dark reddish brown (5YR 3/2) broken face, black (5YR 2.5/1) rubbed muck (sapric material); about 24 percent fiber, 16 percent rubbed; massive; very friable; very strongly acid; clear smooth boundary.

Oa4—43 to 54 inches; dark reddish brown (5YR 2.5/2) broken face, black (5YR 2.5/1) rubbed muck (sapric material); about 30 percent fiber, 10 percent rubbed; massive; very friable; very strongly acid; clear smooth boundary.

Oa5—54 to 65 inches; dark reddish brown (5YR 2.5/2) broken face and rubbed muck (sapric material); about 32 percent fiber, 16 percent rubbed; massive; very friable; strongly acid.

The depth to bedrock is more than 60 inches. The organic material is more than 51 inches thick and composed of mixed woody and herbaceous fibers, with woody fragments. Reaction is extremely acid to strongly acid in the surface O horizon and very strongly acid to neutral below.

The surface tier is neutral or has hue of 5YR to 10YR, value of 2 or 2.5, and chroma of 0 to 2. The horizon is mucky peat or muck, with a thin fibric surface layer up to 2 inches thick.

The subsurface and bottom tiers have hue of 5YR to 10YR, value of 2 to 3, and chroma of 1 to 4. They are dominantly muck.

Colton Series

The Colton series consists of very deep, excessively drained soils. They formed in sandy glaciofluvial deposits on knolls and stream terraces. Slopes range from 3 to 50 percent.

Colton soils, in most places, are near Berkshire and Monadnock soils. Colton soils have more sand and rock fragments in the solum than Berkshire and Monadnock soils.

Typical pedon of Colton gravelly loamy sand, 3 to 8 percent slopes, extremely stony, in woodland, approximately 4,065 feet east of Bart Hill Road and 5,280 feet north of Glastenbury Road, in the town of Shaftsbury lat. 43 degrees 01 minutes 03.5 seconds N. and long. 73 degrees 08 minutes 43.5 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 3 inch; dark brown (7.5YR 3/2) gravelly loamy sand; weak fine granular structure; very friable; many fine and medium roots; 25 percent rock fragments; very strongly acid; abrupt wavy boundary.

E—3 to 8 inches; gray (7.5YR 6/1) very gravelly loamy sand; single grain; loose; many fine and medium roots; 40 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bs1—8 to 12 inches; dark reddish brown (5YR 3/4) very gravelly loamy sand; single grain; loose; many fine and medium roots; 45 percent rock fragments; very strongly acid; clear wavy boundary.

Bs2—12 to 21 inches; brown (7.5YR 4/4) very gravelly loamy sand; single grain; loose; few fine roots; 45 percent rock fragments; very strongly acid; abrupt wavy boundary.

BC—21 to 28 inches; dark yellowish brown (10YR 4/4) very gravelly loamy sand; single grain; loose; few fine roots; 50 percent rock fragments; very strongly acid; abrupt wavy boundary.

C—28 to 67 inches; olive brown (2.5Y 4/4) very gravelly coarse sand; single grain; loose; 55 percent rock fragments; strongly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 40 inches. Rock fragments are mainly gravel and cobbles and range from 15 to 55 percent in the A, E, B and BC horizons; 35 to 70 percent in the C horizon; and are more than 35 percent in the particle size control section. Reaction is extremely acid to strongly acid in the O horizon, extremely acid to moderately acid in the A and E horizons, very strongly acid to moderately acid in the B and BC horizons, and very strongly acid to moderately acid in the C horizon.

The A horizon has hue of 5YR to 10YR, value of 3 or 4, and chroma of 1 to 3.

The E horizon is neutral or has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 or 2. Texture of the A and E horizons is gravelly or very gravelly fine sandy loam, loamy sand, or loamy coarse sand.

The Bh horizon, where present, has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 4.

The Bs horizon has hue of 5YR to 10YR, value of 3 to 6, and chroma of 3 to 8.

The BC horizon has hue of 5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 6.

Texture of the Bh, Bs and BC horizons is gravelly or very gravelly loamy sand, sand, or coarse sand.

The C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 6. Texture is very gravelly or extremely gravelly sand or coarse sand, with thin strata of sand or fine sand present in some pedons.

Copake Series

The Copake series consists of very deep, well drained soils. They formed in loamy over sandy glaciofuvial deposits on stream terraces and knolls and ridges. Slopes range from 0 to 60 percent.

Copake soils, in most places, are near Belgrade, Fredon, Groton, Hero, Occum, Pootatuck, Raynham, and Windsor soils. Copake soils do not have redoximorphic features in the subsoil that are in Belgrade, Fredon, Hero, Pootatuck, and Raynham soils. Copake soils have more rock fragments in the substratum than Windsor soils. Copake soils have a thicker loamy cap than Groton soils. Copake soils have a regular decrease in organic matter, which does not occur in Occum soils.

Typical pedon of Copake gravelly fine sandy loam, 3 to 8 percent slopes, in hayland, approximately 790 feet west of Wuerslin Road and 1,530 feet north of Sandgate Road, in the town of Sandgate, lat. 43 degrees 10 minutes 17.4 seconds N. and long. 73 degrees 10 minutes 19.8 seconds W., NAD 1984:

Ap—0 to 6 inches; very dark grayish brown (10YR 3/2) gravelly fine sandy loam; weak fine granular structure; very friable; common fine roots; 15 percent rock fragments; slightly acid; abrupt wavy boundary.

Bw1—6 to 8 inches; strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 20 percent rock fragments; slightly acid; abrupt wavy boundary.

Bw2—8 to 15 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; 20 percent rock fragments; neutral; abrupt wavy boundary.

Bw3—15 to 22 inches; olive (5Y 4/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common medium roots; 20 percent rock fragments; neutral; abrupt wavy boundary.

2C—22 to 65 inches; olive (5Y 4/4) very gravelly coarse sand; single grain; loose; 50 percent rock fragments; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 5 to 34 percent in the A and B horizons, and 10 to 70 percent in the 2C horizon. Reaction is very strongly acid to neutral in the A horizon, strongly acid to neutral in the B horizon, and slightly acid to moderately alkaline in the 2C horizon.

The Ap horizon has hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 2 or 3. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The Bw horizon has hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 3 to 8. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The 2C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 6. Texture is loamy fine sand, sand, coarse sand or their gravelly or very gravelly analogs.

Dutchess Series

The Dutchess series consists of very deep, well drained soils. They formed in loamy till on hills, knolls, mountains, and ridges. Slopes range from 3 to 60 percent.

Dutchess soils, in most places, are near Brayton, Hubbardton, Macomber, Pittstown, and Taconic soils. Dutchess soils do not have redoximorphic features in the subsoil that are in Brayton and Pittstown soils. Dutchess soils are deeper to bedrock than moderately deep Macomber, shallow Taconic, and very shallow Hubbardton soils.

Typical pedon of Dutchess channery loam, 8 to 15 percent slopes, very stony, in woodland, approximately 6,970 feet east of US Route 7 and 4,165 feet south of Ladd

Brook Road, in the town of Pownal, lat. 42 degrees 45 minutes 50.5 seconds N. and long. 73 degrees 12 minute 23.0 seconds W., NAD 1984:

Oi—0 to 2 inches; slightly decomposed leaves, needles and twigs.

A—2 to 7 inches; dark brown (10YR 3/3) channery loam; weak fine granular structure; friable; many fine and medium roots; 25 percent rock fragments; strongly acid; clear wavy boundary.

Bw1—7 to 12 inches; light olive brown (2.5Y 5/4) channery loam; weak fine subangular blocky structure; friable; common fine and medium roots; 30 percent rock fragments; strongly acid; clear wavy boundary.

Bw2—12 to 16 inches; olive brown (2.5Y 4/4) channery loam; weak fine subangular blocky structure; friable; few fine and medium roots; 30 percent rock fragments; strongly acid; gradual wavy boundary.

Bw3—16 to 28 inches; dark grayish brown (2.5Y 4/2) channery loam; weak fine subangular blocky structure; friable; few medium roots; 25 percent rock fragments; strongly acid; gradual wavy boundary.

C1—28 to 44 inches; dark grayish brown (2.5Y 4/2) channery loam; weak coarse platy structure; firm; few fine roots; 25 percent rock fragments; moderately acid; gradual smooth boundary.

C2—44 to 72 inches; very dark grayish brown (2.5Y 3/2) channery loam; weak medium and coarse subangular blocky structure; friable; 25 percent rock fragments; moderately acid.

Depth to bedrock is greater than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 5 to 34 percent in the A and B horizons and 15 to 35 percent in the C horizon. Reaction is extremely acid to strongly acid in the O horizon, very strongly acid to moderately acid in the A and B horizons, and strongly acid to slightly acid in the C horizon.

The A horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 2 or 3. Texture is silt loam, loam or their channery analogs.

The upper part of the Bw horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6. The lower part of the Bw horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 6. Texture is silt loam, loam or their channery analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4. This horizon is channery or very channery silt loam, loam or fine sandy loam.

Farmington Series

The Farmington series consists of shallow, somewhat excessively drained soils. They formed in thin, loamy till over bedrock on knolls, hills, and ridges. Slopes range from 3 to 50 percent.

Farmington soils, in most places, are near Amenia, Galway, Georgia, Nellis, Pittsfield and Stockbridge soils. The Farmington soils are shallower to bedrock than moderately deep Galway soils and very deep Amenia, Georgia, Nellis, Pittsfield and Stockbridge soils. Farmington soils are mapped only in complexes with Galway and Nellis soils in the survey area.

Typical pedon of Farmington silt loam, in an area of Galway-Farmington complex, 25 to 50 percent slopes, very rocky, in woodland, approximately 2,390 feet north of Trumbull Hill Road and 2,805 feet east of Hollow Road, in the town of Shaftsbury, lat. 42 degrees 59 minutes 26.6 seconds N. and long. 73 degrees 10 minutes 14.2 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 3 inches; moderately decomposed leaves and twigs.

A—3 to 5 inches; very dark gray (10YR 3/1) silt loam; weak fine granular structure; very friable; many fine and medium roots; 5 percent rock fragments; moderately acid; abrupt wavy boundary.

Bw1—5 to 12 inches; strong brown (7.5YR 5/6) loam; weak fine subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; moderately acid; clear wavy boundary.

Bw2—12 to 21 inches; brown (7.5YR 4/4) gravelly loam; weak fine subangular blocky structure; friable; common fine and medium roots; 15 percent rock fragments; neutral; abrupt wavy boundary.

R—21 inches; limestone bedrock.

The depth to bedrock and thickness of the solum ranges from 10 to 20 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon, strongly acid to neutral in the A horizon, and moderately acid to slightly alkaline in the B horizon.

The A horizon has hue of 10YR, value of 3 to 5, and chroma of 1 to 3. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The Bw horizon has hue of 7.5YR to 2.5Y, value of 4 or 5, and chroma of 3 to 6. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The bedrock is limestone, marble or dolomite..

Fredon Series

The Fredon series consists of very deep somewhat poorly drained soils. They formed in loamy over sandy glaciofluvial deposits in depressions and drainageways on low stream terraces. Slopes range from 0 to 3 percent.

Fredon soils, in most places, are near Copake, Groton, Hero, and Pootatuck soils. Fredon soils have redoximorphic features in the entire subsoil that are not in Copake, Groton, Hero and Pootatuck soils.

Typical pedon of Fredon fine sandy loam, 0 to 3 percent slopes, in hayland, approximately 835 feet west of Vermont Route 30, 5,195 feet north of Vermont Route 315, and 1,125 feet south of North Rupert Village, in the town of Ruppert, lat. 43 degrees 17 minutes 46.1 seconds N. and long. 73 degrees 08 minutes 45.2 seconds W., NAD 1984:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak medium granular structure; very friable; common fine and very fine roots; 10 percent rock fragments; neutral; abrupt smooth boundary.

Bw—9 to 11 inches; olive brown (2.5Y 4/3) silt loam; weak fine subangular blocky structure; very friable; common fine and very fine roots; common fine and medium distinct brown (7.5YR 4/4) masses of iron accumulation; 10 percent rock fragments; neutral; clear smooth boundary.

Bg—11 to 23 inches; olive gray (5Y 4/2) silt loam; weak fine subangular blocky structure; friable; common fine and very fine roots; common fine and medium distinct brown (10YR 4/3) masses of iron accumulation; 10 percent rock fragments; neutral; clear smooth boundary.

Cg1—23 to 33 inches; dark gray (5Y 4/1) gravelly loamy sand; single grain; loose; few fine roots; many fine and medium prominent olive brown (2.5Y 4/4) masses of iron accumulation; 30 percent rock fragments; neutral; abrupt wavy boundary.

Cg2—33 to 65 inches; dark gray (5Y 4/1) very gravelly coarse sand; single grain; loose; many fine and medium prominent dark brown (7.5YR 3/4) masses of iron accumulation; 35 percent rock fragments; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 22 to 40 inches. Rock fragments range from 2 to 34 percent in the A and B horizons and 10 to 59 percent in the C horizon. Reaction is moderately acid to neutral in the A and B horizons and moderately acid to moderately alkaline in the C horizon.

The Ap horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2. Texture is silt loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

The Bw and Bg horizons have hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4. Texture is silt loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 1 to 4. Texture is loamy fine sand to coarse sand or their gravelly or very gravelly analogs.

Galway Series

The Galway series consists of moderately deep, well drained soils. They formed in loamy till on knolls, hills, and ridges. Slopes range from 3 to 50 percent.

Galway soils, in most places, are near Amenia, Farmington, Georgia, Nellis, Pittsfield and Stockbridge soils. Galway soils are shallower to bedrock than very deep Amenia, Georgia, Nellis, Pittsfield, and Stockbridge soils and deeper to bedrock than shallow Farmington soils. Galway soils are mapped only in complexes with Farmington and Nellis soils in the survey area.

Typical pedon of Galway silt loam, in an area of Galway-Farmington complex, 25 to 50 percent slopes, very rocky, in woodland, approximately 3,590 feet north of Trumbull Hill Road and 5,280 feet east of the railroad, in the town of Shaftsbury, lat. 42 degrees 59 minutes 37.9 seconds N. and long. 73 degrees 10 minutes 04.7 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 4 inches; very dark grayish brown (10YR 3/2) silt loam; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; moderately acid; abrupt smooth boundary.

Bw1—4 to 11 inches; reddish brown (5YR 4/4) loam; moderate medium subangular blocky structure; friable; common fine and medium roots; 5 percent rock fragments; moderately acid; clear wavy boundary.

Bw2—11 to 21 inches; yellowish red (5YR 4/6) silt loam; moderate medium subangular blocky structure; friable; few fine and medium roots; 5 percent rock fragments; neutral; clear wavy boundary.

BC—21 to 32 inches; reddish brown (5YR 4/4) very gravelly silt loam; weak medium subangular blocky structure; friable; few fine roots; 35 percent rock fragments; slight effervescence; neutral; abrupt irregular boundary.

R—32 inches; limestone bedrock.

The depth to bedrock ranges from 20 to 40 inches. The thickness of the solum ranges from 18 to 30 inches. Depth to carbonates is 14 to 40 inches. Rock fragments range from 3 to 34 percent in the A and B horizons and 10 to 50 percent in the BC and C horizons. Reaction is extremely acid to strongly acid in the O horizon, moderately acid to neutral in the A horizon, moderately acid to slightly alkaline in the B horizon, and slightly alkaline or moderately alkaline in the BC and C horizons.

The A horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3. Texture is silt loam, loam or their gravelly analogs.

The Bw horizon has hue of 5YR to 2.5Y, value of 3 to 6, and chroma of 3 to 6. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The BC and C horizons, where present, have hue of 5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 4. They are silt loam, fine sandy loam or their gravelly or very gravelly analogs.

The bedrock is limestone, marble or dolomite.

Georgia Series

The Georgia series consists of very deep, moderately well drained soils. They formed in loamy till on knolls, hills, and ridges. Slopes range from 0 to 25 percent.

Georgia soils, in most places, are near Farmington, Galway, Massena, Nellis, Pittsfield, and Stockbridge soils. Georgia soils are deeper to bedrock than shallow Farmington and moderately deep Galway soils. Georgia soils have redoximorphic features in the subsoil that are not in Nellis, Pittsfield, and Stockbridge soils. Georgia soils do not have redoximorphic features in the upper part of the subsoil that are in Massena soils.

Typical pedon of Georgia loam, 3 to 8 percent slopes, in cropland, approximately 1,225 feet north of Myers Road and 1,100 feet west of Vermont Route 7A, in the town of Shaftsbury, lat. 42 degrees 58 minutes 15.2 seconds N. and long. 73 degrees 12 minutes 41.9 seconds W., NAD 1984:

Ap—0 to 10 inches; very dark grayish brown (10YR 3/2) loam; light brownish gray (10YR 6/2) dry; weak fine granular structure; very friable; many fine and medium roots; 5 percent rock fragments; neutral; abrupt smooth boundary.

Bw1—10 to 18 inches; yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; many fine and medium roots; 10 percent rock fragments; neutral; clear wavy boundary.

Bw2—18 to 26 inches; olive brown (2.5Y 4/4) silt loam; weak fine subangular blocky structure; friable; common fine and medium roots; common medium distinct dark grayish brown (2.5Y 4/2) iron depletions and light olive brown (2.5Y 5/6) masses of iron accumulation; 10 percent rock fragments; neutral; clear wavy boundary.

BC—26 to 30 inches; olive (5Y 4/4) silt loam; weak fine subangular blocky structure; friable; few fine roots; many medium distinct grayish brown (2.5Y 5/2) iron depletions and many medium prominent dark grayish brown (10YR 4/2) masses of iron accumulation; 10 percent rock fragments; neutral; clear wavy boundary.

C—30 to 65 inches; olive (5Y 4/3) gravelly silt loam; weak fine subangular blocky structure; firm; many medium faint dark grayish brown (2.5Y 4/2) iron depletions; 15 percent rock fragments; slightly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 16 to 32 inches. Depth to carbonates is more than 40 inches. Rock fragments range from 1 to 34 percent. Reaction is strongly acid to neutral. The O horizon, where present, is extremely acid to strongly acid.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3. Texture is silt loam, loam or their gravelly analogs.

The Bw horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6. Texture is silt loam, loam or their gravelly analogs.

The BC horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 3 or 4. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 1 to 4. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

Glebe Series

The Glebe series consists of moderately deep, well drained soils. They formed in loamy till on mountains, at the highest elevations in the county. Slopes range from 15 to 60 percent.

Glebe soils, in most places, are near Hogback, Houghtonville, Londonderry, Rawsonville, and Stratton soils. Glebe soils have a cryic soil temperature regime and Hogback, Houghtonville, and Rawsonville soils have a frigid soil temperature regime. Glebe soils are deeper to bedrock than very shallow Londonderry and shallow

Stratton soils. Glebe soils are mapped only in complexes with Londonderry and Stratton soils and in associations with Stratton soils in the survey area.

Typical pedon of Glebe fine sandy loam, in an area of Glebe-Stratton association, very hilly, very rocky, 100 feet east of the summit of Peru Peak, in the town of Peru, lat. 43 degrees 17 minutes 40.3 seconds N. and long. 72 degrees 56 minutes 13.7 seconds W., NAD:

Oi—0 to 1 inch; slightly decomposed moss, leaves, needles, and twigs.

Oe—1 to 3 inches; moderately decomposed leaves, needles, and twigs.

A—3 to 7 inches; black (5YR 2/1) fine sandy loam; weak fine granular structure; very friable; many very fine roots; 10 percent rock fragments; extremely acid; abrupt wavy boundary.

E—7 to 11 inches; dark gray (5YR 4/1) gravelly fine sandy loam; weak fine granular structure; very friable; many fine and common medium roots; 15 percent rock fragments; extremely acid; abrupt wavy boundary.

Bh—11 to 19 inches; very dark gray (5YR 3/1) gravelly fine sandy loam; weak fine subangular blocky structure; very friable; few fine and medium roots; 15 percent rock fragments; extremely acid; clear wavy boundary.

Bhs—19 to 23 inches; dark reddish brown (5YR 3/3) gravelly fine sandy loam; weak fine subangular blocky structure; friable; few fine and medium roots; 15 percent rock fragments; extremely acid; abrupt wavy boundary.

Bs—23 to 28 inches; dark yellowish brown (10YR 4/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common medium roots; 15 percent rock fragments; very strongly acid; abrupt wavy boundary.

R—28 inches; schist bedrock.

The depth to bedrock ranges from 20 to 40 inches. The thickness of the solum ranges from 14 to 38 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid.

The A horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. Texture is silt loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

The E horizon has hue of 5YR to 10YR, value of 3 to 6, and chroma of 1 to 3. Texture is fine sandy loam, sandy loam, or their gravelly analogs.

The Bh horizon has hue of 2.5YR to 7.5YR, and typically has value of 2 or 3, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 10YR and value and chroma of approximately 3 or less.

The Bs horizon has hue of 5YR to 10YR and value and chroma of 4 or more.

The B horizons are silt loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly analogs.

Some pedons have a C horizon with hue of 10YR to 5Y, value of 3 or 4, and chroma of 2 to 4. Texture is fine sandy loam, sandy loam, loamy fine sand, loamy sand or their gravelly analogs.

Bedrock is phyllite, schist or gneiss.

Groton Series

The Groton series consists of very deep, excessively drained soils. They formed in glaciofluvial deposits on stream terraces. Slopes range from 0 to 60 percent.

Groton soils, in most places, are near Copake, Fredon, Hero, Occum and Windsor soils. Groton soils have carbonates within a depth of 40 inches that are not in Copake, Occum, and Windsor soils. Groton soils do not have redoximorphic features in the subsoil that are in Fredon and Hero soils.

Typical pedon of Groton gravelly fine sandy loam, 0 to 3 percent slopes, in hayland, approximately 450 feet west of US Route 7 and 1,100 feet south-southwest of the intersection of North Road 140 feet from the intersection with US Route 7, in the town of Manchester lat. 43 degrees 11 minutes 32.4 seconds N. and long. 73 degrees 02 minutes 32.7 seconds W., NAD 1984:

Ap—0 to 8 inches; dark brown (10YR 3/3) gravelly fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 30 percent rock fragments; neutral; abrupt wavy boundary.
Bw1—8 to 14 inches; brown (7.5YR 4/4) gravelly fine sandy loam; weak fine subangular blocky structure; very friable; common fine and medium roots; 30 percent rock fragments; neutral; clear smooth boundary.
Bw2—14 to 22 inches; dark yellowish brown (10YR 4/4) very gravelly sandy loam; weak fine subangular blocky structure; very friable; common fine and medium roots; 35 percent rock fragments; neutral; abrupt wavy boundary.
C—22 to 65 inches; olive brown (2.5Y 4/4) very gravelly coarse sand; single grain; loose; few very fine and fine roots in the upper part; 50 percent rock fragments; strongly effervescent; moderately alkaline.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 12 to 36 inches. Rock fragments range from 20 to 50 percent in the A and B horizons, from 25 to 70 percent in the C horizon, and are more than 35 percent in the particle size control section. Reaction is moderately acid to neutral in the A horizon and upper part of the B horizon, moderately acid to slightly alkaline in the lower part of the B horizon, and neutral to moderately alkaline in the C horizon. Carbonates are within a depth of 40 inches.

The Ap horizon has hue of 7.5YR to 2.5Y, value of 3 or 4, chroma of 2 or 3. Texture is gravelly or very gravelly loam, fine sandy loam, or sandy loam.

The Bw horizon has hue of 7.5YR to 2.5YR, value of 3 to 5, and chroma of 3 to 6. Texture is gravelly or very gravelly fine sandy loam or sandy loam in the upper part, and gravelly or very gravelly sandy loam, loamy fine sand, or loamy sand in the lower part.

The C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 6. Texture is gravelly, very gravelly or extremely gravelly loamy fine sand, sand or coarse sand.

Hartland Series

The Hartland series consists of very deep, well drained soils. They formed in silty glaciolacustrine deposits on stream terraces, glacial lake plains and knolls. Slopes range from 0 to 5 percent.

Hartland soils, in most places, are near Belgrade, Raynham, and Windsor soils. Hartland soils do not have redoximorphic features in the subsoil that are in Belgrade and Raynham soils. Hartland soils have less fine or coarser sand in the solum and substratum than Windsor soils.

Typical pedon of Hartland silt loam, 0 to 5 percent slopes, in hayland, approximately 1,190 feet east of VT Route 7A and 925 feet north of Old Depot Road, in the town of Shaftsbury, lat. 43 degrees 00 minutes 44.6 seconds N. and long. 73 degrees 11 minutes 26.2 seconds W., NAD 1984:

Ap—0 to 9 inches; brown (10YR 4/3) silt loam; weak fine and medium granular structure; very friable; common fine and very fine roots; neutral; abrupt smooth boundary.
Bw—9 to 18 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; friable; common fine and very fine roots; neutral; abrupt smooth boundary.
C1—18 to 32 inches; stratified olive brown (2.5Y 4/4) and light olive brown (2.5Y 5/4) very fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; 5 percent rock fragments; neutral; abrupt smooth boundary.

C2—32 to 58 inches; stratified olive brown (2.5Y 4/4) silt loam and yellowish brown (10YR 5/6) very fine sandy loam; weak medium subangular blocky structure; friable; 5 percent rock fragments; neutral; abrupt smooth boundary.
C3—58 to 65 inches; stratified olive brown (2.5Y 4/4) loamy very fine sand and light yellowish brown (2.5Y 6/4) very fine sand; weak medium subangular blocky in the loamy part and single grain in the sandy part; very friable; 5 percent rock fragments; slight effervescence; slightly alkaline.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 14 to 40 inches. Rock fragments range from 0 to 5 percent. Reaction is strongly acid to slightly alkaline.

The Ap horizon has hue of 10YR or 2.5Y, value 3 or 4, and chroma of 2 or 3. Texture is silt, silt loam, or very fine sandy loam..

The B horizon has hue of 7.5YR to 5Y, value of 4 or 5, and chroma of 3 to 6. Texture is silt, silt loam, or very fine sandy loam..

The C horizon has hue of 10YR to 5Y, value 3 to 6, and chroma of 2 to 6. Texture is silt loam, very fine sandy loam, or silt in the upper part and includes loamy very fine sand and very fine sand in the lower part.

Hero Series

The Hero series consists of very deep, moderately well drained soils. They formed in loamy over sandy glaciofluvial deposits on stream terraces. Slopes range from 0 to 8 percent.

Hero soils, in most places, are near Copake, Fredon, Groton, Occum, Pootatuck, and Windsor soils. Hero soils have redoximorphic features in the subsoil that are not in Copake, Groton, Occum, and Windsor soils. Hero soils do not have redoximorphic features in the upper part of the subsoil that are in Fredon soils. Hero soils have a regular decrease in organic matter with depth, which does not occur in Pootatuck soils.

Typical pedon of Hero gravelly fine sandy loam, 3 to 8 percent slopes, in a pasture, approximately 745 feet west of Sandgate Road and 3,440 feet south of Wuerslin Road, in the town of Sandgate, lat. 43 degrees 09 minutes 59.2 seconds N. and long. 73 degrees 10 minutes 32.6 seconds W., NAD 1984:

Ap—0 to 8 inches; brown (10YR 4/3) gravelly fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 15 percent rock fragments; slightly acid; abrupt smooth boundary.
Bw1—8 to 12 inches; yellowish brown (10YR 5/6) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; 15 percent rock fragments; slightly acid; clear smooth boundary.
Bw2—12 to 19 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; 15 percent rock fragments; slightly acid; clear smooth boundary.
Bw3—19 to 24 inches; olive (5Y 4/3) gravelly silt loam; weak fine subangular blocky structure; few fine roots; common fine and medium prominent light olive brown (2.5Y 5/6) and common fine and medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation and common fine and medium faint olive gray (5Y 4/2) iron depletions; 15 percent rock fragments; slightly acid; abrupt wavy boundary.
2C—24 to 65 inches; olive gray (5Y 4/2) very gravelly sand; single grain; loose; many fine and medium prominent brown (7.5YR 4/4) and dark reddish brown (5YR 3/4) and many fine and medium distinct dark brown (10YR 3/3) masses of iron accumulation; 45 percent rock fragments; slight effervescence; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 36 inches. Rock fragments range from 5 to 34 percent in the A and B horizons and 15 to 59 percent in the 2C horizon. Reaction is moderately acid to neutral in the A horizon, moderately acid to slightly alkaline in the B horizon, and neutral to moderately alkaline in the 2C horizon. Carbonates are within a depth of 40 inches.

The Ap horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 3. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The Bw horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 6. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The 2C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4. It is gravelly or very gravelly loamy fine sand to coarse sand.

Hogback Series

The Hogback series consists of shallow, well drained soils. They formed in thin, loamy till over bedrock on ridges, mountains, and hills. Slopes range from 8 to 70 percent.

Hogback soils, in most places, are near Houghtonville, Glebe, Londonderry, Mundal, Rawsonville, Stratton, and Wilmington soils. Hogback soils are shallower to bedrock than the moderately deep Rawsonville soils and the very deep Houghtonville, Mundal, and Wilmington soils. Hogback soils have a frigid soil temperature regime and Glebe, Londonderry, and Stratton soils have a cryic soil temperature regime. Hogback soils are mapped only in complexes and associations with the Rawsonville soils in the survey area.

Typical pedon of Hogback fine sandy loam, in an area of Rawsonville-Hogback complex, 8 to 15 percent slopes, very rocky, in woodland, approximately 5,280 feet southeast of Thompson Pond and 5,800 feet west of Broad Brook, in the town of Pownal, lat. 42 degrees 46 minutes 08.9 seconds N. and long. 73 degrees 10 minutes 15.0 seconds W., NAD 1984:

Oi—0 to 2 inches; slightly decomposed leaves, needles and twigs.

A—2 to 6 inches; black (5YR 2.5/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 5 percent rock fragments; extremely acid; abrupt smooth boundary.

E—6 to 8 inches; brown (7.5YR 4/2) gravelly fine sandy loam; weak fine subangular blocky structure; very friable; many fine and common medium roots; 15 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bh—8 to 13 inches; dark reddish brown (5YR 3/2) gravelly fine sandy loam; moderate medium and coarse subangular blocky structure; friable; many fine and common medium roots; 20 percent rock fragments; moderately smeary; very strongly acid; clear smooth boundary.

Bhs—13 to 17 inches; dark brown (7.5YR 3/3) very gravelly fine sandy loam; moderate medium and coarse subangular blocky structure; friable; many fine and few medium roots; 35 percent rock fragments; moderately smeary; strongly acid; abrupt wavy boundary.

R—17 inches; schist bedrock.

The depth to bedrock and thickness of the solum range from 10 to 20 inches. Reaction is extremely acid to strongly acid. Rock fragments range from 5 to 35 percent.

The A horizon has hue of 5YR to 10YR, value of 2 to 3, and chroma of 1 or 2. Texture is loam, fine sandy loam or their gravelly analogs.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2. Texture is loam, fine sandy loam or their gravelly analogs.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 1 or 2. The Bh horizon is 4 or more inches thick.

The Bhs horizon has hue of 2.5YR to 7.5YR, with value and chroma of approximately 3 or less.

The Bs horizon, where present, has hue of 2.5YR to 7.5YR, with value and chroma of 4 or more.

The B horizons are loam, fine sandy loam, or their gravelly or very gravelly analogs and are weakly to moderately smeary. The combined thickness of the Bh, Bhs and Bs horizons is more than 8 inches.

Bedrock is phyllite, schist or gneiss.

Houghtonville Series

The Houghtonville series consists of very deep, well drained soils. They formed in loamy till on ridges, mountains, and hills. Slopes range from 3 to 60 percent.

Houghtonville soils, in most places, are near Glebe, Hogback, Monadnock, Mundal, Rawsonville, and, Wilmington soils. Houghtonville soils are deeper to bedrock than the shallow Hogback soils and the moderately deep Glebe and Rawsonville soils. Houghtonville soils do not have redoximorphic features in the substratum that are in the Mundal and Wilmington soils. Houghtonville soils do not have sandy textures in the substratum that are in the Monadnock soils. Houghtonville soils are mapped as consociations, in complexes with the Rawsonville soils and in associations with the Monadnock, Mundal, and Rawsonville soils in the survey area.

Typical pedon of Houghtonville fine sandy loam, in an area of Rawsonville-Houghtonville-Mundal association, hilly, rocky, in woodland, approximately 1,160 feet east of Mad Tom Brook and 2,690 feet North of National Forest Road 21, in the town of Peru, lat. 43 degrees 15 minutes 38.4 seconds N. and long. 72 degrees 57 minutes 15.7 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 4 inches; dark brown (7.5YR 3/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots; 5 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bh—4 to 9 inches; very dark grayish brown (10YR 3/2) gravelly fine sandy loam; weak fine subangular blocky structure; very friable; many very fine, fine and medium roots; 20 percent rock fragments; weakly smeary; strongly acid; abrupt wavy boundary.

Bhs1—9 to 25 inches; dark brown (10YR 3/3) gravelly fine sandy loam; weak fine subangular blocky structure; friable; many fine and common medium roots; 15 percent rock fragments; moderately smeary; strongly acid; clear wavy boundary.

Bhs2—25 to 37 inches; dark brown (10YR 3/3) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common medium and coarse roots; 30 percent rock fragments; moderately smeary; strongly acid; clear wavy boundary.

C—37 to 67 inches; dark grayish brown (2.5Y 4/2) fine sandy loam; massive; friable; common medium and few coarse roots; 10 percent rock fragments; strongly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 42 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A horizon has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The E horizon, where present, has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2. Texture is silt loam, fine sandy loam or their gravelly analogs.

The Bh horizon has hue of 5YR to 10YR and typically has a value of 2 or 3, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 10YR, with value and chroma of approximately 3 or less.

The Bs horizon, where present, has hue of 5YR to 10YR, with value and chroma of 4 or more.

The B horizons are silt loam, loam, fine sandy loam, sandy loam or their gravelly analogs and are weakly to moderately smeary. Combined thickness of the Bh, Bhs and Bs horizons is more than 16 inches.

The BC horizon, where present, has hue of 10YR to 5Y, value of 3 to 5, and chroma of 3 to 6. Texture is silt loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4. Texture is silt loam, fine sandy loam, sandy loam or their gravelly analogs.

Hubbardton Series

The Hubbardton series consists of very shallow, excessively drained soils. They formed in thin, loamy till over bedrock on hills and mountains. Slopes range from 25 to 70 percent.

Hubbardton soils, in most places, are near Dutchess, Macomber, Pittstown, and Taconic soils. Hubbardton soils are shallower to bedrock than the very deep Dutchess and Pittstown soils, moderately deep Macomber soils, and shallow Taconic soils. Hubbardton soils are mapped only in complexes with Taconic soils in the survey area.

Typical pedon of Hubbardton flaggy fine sandy loam, in an area of Taconic-Hubbardton-Rock outcrop complex, 25 to 70 percent slopes, very stony, in woodland, approximately 330 feet north of West Sandgate Road and 625 feet east of Tate Hill Road, in the town of Sandgate, lat. 43 degrees 09 minutes 26.1 seconds N. and long. 73 degrees 13 minutes 13.2 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 4 inches; brown (10YR 4/3) flaggy fine sandy loam; weak fine granular structure; very friable; many fine and medium roots; 30 percent rock fragments; strongly acid; abrupt wavy boundary.

Bw—4 to 8 inches; olive brown (2.5Y 4/4) very channery fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 40 percent rock fragments; strongly acid; abrupt wavy boundary.

R—8 inches; slate bedrock.

The depth to bedrock and the thickness of the solum range from 2 to 10 inches. Rock fragments range from 30 to 60 percent and are more than 35 percent in the particle size control section. Reaction is extremely acid to strongly acid in the O horizon and very strongly acid to strongly acid in the A and B horizons.

The A horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 3. The horizon is flaggy, channery, very flaggy or very channery silt loam or fine sandy loam.

The Bw horizon has hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 3 to 6. The horizon is flaggy, channery, very flaggy or very channery silt loam or fine sandy loam.

Bedrock is phyllite, schist or slate.

Limerick Series

The Limerick series consists of very deep, poorly drained soils. They formed in loamy alluvium on flood plains. Slopes range from 0 to 3 percent.

Limerick soils, in most places, are near Occum, Pootatuck and Saco soils. Limerick soils have redoximorphic features in the layer below the surface layer that are not in the Occum and Pootatuck soils. Limerick soils do not have redoximorphic features in the surface layer that are in the Saco soils.

Typical pedon of Limerick silt loam, 0 to 3 percent slopes, approximately 245 feet west-southwest of the VT Route 7A crossing of the Batten Kill and 4,765 west of Sunderland Hill Road, in the town of Arlington, lat. 43 degrees 05 minutes 50.1 seconds N. and long. 73 degrees 08 minutes 31.2 seconds W., NAD 1984:

Ap—0 to 6 inches; very dark grayish brown (10YR 3/2) silt loam; light brownish gray (10YR 6/2) dry; weak fine granular structure; very friable; many fine roots; neutral; abrupt smooth boundary.

Cg1—6 to 11 inches; dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; common fine roots; many medium prominent dark reddish brown (5YR 3/4) masses of iron accumulation; neutral; abrupt smooth boundary.

Cg2—11 to 24 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; few fine roots; common fine and medium prominent dark reddish brown (2.5YR 3/4) masses of iron accumulation; neutral; abrupt wavy boundary.

Cg3—24 to 65 inches; grayish brown (2.5Y 5/2) silt loam; massive; friable; many fine and medium prominent dark reddish brown (2.5YR 3/4) masses of iron accumulation; neutral.

The depth to bedrock is more than 60 inches. Rock fragments range from 0 to 5 percent. Reaction is strongly acid to neutral in the A horizon and moderately acid to neutral in the C horizon.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3. Texture is silt loam or very fine sandy loam, with lenses of loamy very fine sand or very fine sand present in some pedons.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2 above 30 inches, and 1 to 4 below 30 inches. Texture is silt loam or very fine sandy loam, with lenses of loamy very fine sand or very fine sand present in some pedons.

Londonderry Series

The Londonderry series consists of very shallow, well drained soils. They formed in thin, loamy till over bedrock, on mountains, at the highest elevations in the county. Slopes range from 15 to 60 percent.

Londonderry soils, in most places, are near Glebe, Hogback, Rawsonville, and Stratton soils. Londonderry soils are shallower to bedrock than shallow the Hogback and Stratton soils and moderately deep Glebe and Rawsonville soils. Londonderry soils are mapped only in complexes with the Glebe and Stratton soils in the survey area.

Typical pedon of Londonderry gravelly silt loam, in an area of Glebe-Stratton-Londonderry complex, 25 to 60 percent slopes, very rocky, approximately 3,830 feet east of VT Route 8 and 7,500 feet north-northeast of the junction of VT Routes 8 and 100, in the town of Readsboro, lat. 42 degrees 50 minutes 51.7 seconds N. and long. 72 degrees, 58 minutes 28.6 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed moss, leaves, needles and twigs.

A—1 to 4 inches; black (7.5YR 2.5/1) gravelly silt loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 15 percent rock fragments; extremely acid; abrupt smooth boundary.

E—4 to 6 inches; dark gray (5YR 4/1) gravelly fine sandy loam; weak fine granular structure; very friable; many fine and medium and common coarse roots; 15 percent rock fragments; extremely acid; abrupt smooth boundary.

R—6 inches; schist bedrock.

The depth to bedrock and the thickness of the solum range from 2 to 10 inches. Rock fragments range from 1 to 20 percent. Reaction is extremely acid to strongly acid.

The A horizon is neutral or has hue of 7.5YR to 2.5Y, value of 1 to 3, and chroma of 0 to 2. Texture is silt loam, fine sandy loam, sandy loam or their gravelly analogs.

The E horizon is neutral or has hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 0 to 2. Texture is silt loam, fine sandy loam, sandy loam or their gravelly analogs.

Bedrock is schist, phyllite, or gneiss.

Lyman Series

The Lyman series consists of shallow, somewhat excessively drained soils. They formed in thin, loamy till on knolls, hills, ridges, and mountains. Slopes range from 8 to 70 percent.

Lyman soils, in most places, are near Berkshire, Peru, and Tunbridge soils. Lyman soils are shallower to bedrock than the moderately deep Tunbridge and the very deep Berkshire and Peru soils. Lyman soils are mapped only in complexes with Tunbridge soils in the survey area.

Typical pedon of Lyman fine sandy loam, in an area of Tunbridge-Lyman complex, 8 to 15 percent slopes, very rocky, in woodland, approximately 16,370 feet west of VT Route 100 and 6,760 feet south of VT Route 11, in the town of Peru, lat. 43 degrees 12 minutes 59.8 seconds N. and long. 72 degrees 53 minutes 03.5 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves, needles and twigs.

Oe—1 to 3 inches; moderately decomposed leaves, needles and twigs.

A—3 to 5 inches; very dark brown (10YR 2/2) fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bhs—5 to 10 inches; dark brown (7.5YR 3/3) fine sandy loam; moderate fine and medium subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; moderately smeary; very strongly acid; clear smooth boundary.

Bs1—10 to 16 inches; brown (7.5YR 4/4) channery fine sandy loam; moderate fine and medium subangular blocky structure; friable; common fine roots; 15 percent rock fragments; moderately smeary; strongly acid; clear smooth boundary.

Bs2—16 to 19 inches; brown (7.5YR 4/4) channery fine sandy loam; moderate medium and coarse subangular blocky structure; friable; few fine roots; 25 percent rock fragments; weakly smeary; strongly acid; abrupt wavy boundary.

R—19 inches; schist bedrock.

The depth to bedrock and the thickness of the solum range from 10 to 20 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. Texture is silt loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly or channery analogs.

The E horizon, where present, has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2. Texture is silt loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly or channery analogs.

The Bh horizon, where present, is less than 4 inches thick and has hue of 5YR to 10YR, value of 2 to 4, and chroma of 2 to 4.

The Bhs horizon has hue of 5YR to 10YR, and value and chroma of approximately 3 or less.

The Bs horizon has hue of 5YR to 10YR, value of 3 to 5, and chroma of 4 to 8.

The Bh, Bhs, and Bs horizons are silt loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly or channery analogs.

Bedrock is schist, phyllite, or gneiss.

Macomber Series

The Macomber series consists of moderately deep, well drained soils. They formed in loamy till on hills, mountains, and ridges. Slopes range from 8 to 60 percent.

Macomber soils, in most places, are near Brayton, Dutchess, Hubbardton, Mansfield, Pittstown, and Taconic soils. Macomber soils are shallower to bedrock than the very deep Brayton, Dutchess, Mansfield, and Pittstown soils and deeper to bedrock than the very shallow Hubbardton and shallow Taconic soils. Macomber soils are mapped only in complexes with Taconic soils in the survey area.

Typical pedon of Macomber channery silt loam, in an area of Macomber-Taconic complex, 15 to 25 percent slopes, rocky, in woodland, approximately 715 feet north of Southeast Corner Road and 7,180 feet west of Equinox Skyline Drive, in the town of Sandgate, lat. 43 degrees 08 minutes 03.1 seconds N., and long. 73 degrees 09 minutes 31.3 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

A—1 to 3 inches; black (10YR 2/1) channery silt loam; weak fine granular structure; very friable; many very fine and fine roots; 30 percent rock fragments; strongly acid; abrupt smooth boundary.

Bw1—3 to 7 inches; brown (7.5YR 4/4) channery silt loam; moderate fine granular structure; very friable; many very fine and fine, and common medium roots; 30 percent rock fragments; strongly acid; clear smooth boundary.

Bw2—7 to 13 inches; dark yellowish brown (10YR 4/6) very channery silt loam; moderate fine and medium subangular blocky structure; very friable; many very fine and fine, and common medium roots; 40 percent rock fragments; moderately acid; clear smooth boundary.

Bw3—13 to 21 inches; light olive brown (2.5Y 5/6) very channery silt loam; moderate fine and medium subangular blocky structure; very friable; many fine, common medium and few coarse roots; 40 percent rock fragments; moderately acid; clear smooth boundary.

Bw4—21 to 31 inches; light olive brown (2.5Y 5/6) very channery silt loam; weak fine and medium subangular blocky structure; friable; common fine and medium and few coarse roots; 50 percent rock fragments; moderately acid; clear smooth boundary.

C—31 to 37 inches; olive brown (2.5Y 4/4) very channery silt loam; weak fine and medium subangular blocky structure; friable; few fine and medium roots; 50 percent slate fragments; moderately acid; abrupt wavy boundary.

R—37 inches; slate bedrock.

The depth to bedrock ranges from 20 to 40 inches. The thickness of the solum thickness ranges from 15 to 30 inches. Rock fragments range from 10 to 35 percent in the A horizon, 30 to 60 percent in the B horizon, 40 to 65 percent in the C horizon, and are more than 35 percent in the particle size control section. Reaction ranges extremely acid to strongly acid in the O horizon and very strongly acid to moderately acid below.

The A horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 4. Texture is silt loam or loam or their channery or very channery analogs.

The Bw horizon has hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 3 to 6. The 7.5YR hue occurs only in the upper part of the horizon. The horizon is channery, very channery, or extremely channery silt loam or loam.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 6. The horizon is very channery or extremely channery silt loam or loam.

The bedrock is slate or phyllite.

Mansfield Series

The Mansfield series consists of very poorly drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till in depressions and drainageways on uplands. Slopes range from 0 to 3 percent.

Mansfield soils, in most places, are near Brayton, Macomber, Pittstown, and Taconic soils. Mansfield soils have more organic carbon in the surface layer than Brayton and Pittstown soils. Mansfield soils are deeper to bedrock than the moderately deep Macomber soils and shallow Taconic soils.

Typical pedon of Mansfield mucky silt loam, 0 to 3 percent slopes, very stony, in woodland, approximately 1,950 feet south-southeast of Tipladys Road and 4,490 feet west of VT Route 153, in the town of Ruppert, lat. 43 degrees 14 minutes 53.4 seconds N. and long. 73 degrees 15 minutes 11.5 seconds W., NAD 1984:

Oe—0 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 13 inches; very dark brown (10YR 2/2) mucky silt loam; dark grayish brown (10YR 4/2) dry; moderate fine and medium granular structure; friable; many fine and medium roots; 5 percent rock fragments; strongly acid; abrupt wavy boundary.

Bg1—13 to 18 inches; dark gray (5Y 4/1) gravelly loam; weak fine and medium subangular blocky structure; friable; few fine and medium roots; few fine prominent light olive brown (2.5Y 5/4) masses of iron accumulation; 25 percent rock fragments; strongly acid; clear wavy boundary.

Bg2—18 to 22 inches; gray (5Y 5/1) gravelly loam; weak fine and medium subangular blocky structure; firm; few fine prominent olive brown (2.5Y 4/4) and light olive brown (2.5Y 5/6) masses of iron accumulation; 20 percent rock fragments; slightly acid; clear wavy boundary.

Cdg1—22 to 30 inches; grayish brown (2.5Y 5/2) channery loam; massive; very firm; few fine prominent light olive brown (2.5Y 5/6) masses of iron accumulation; 25 percent rock fragments; slightly acid; gradual wavy boundary.

Cdg2—30 to 39 inches; gray (5Y 5/1) and light olive brown (2.5Y 5/4) channery loam; massive; very firm; 25 percent rock fragments; neutral; gradual smooth boundary.

Cdg3—39 to 67 inches; olive gray (5Y 5/2) and light olive brown (2.5Y 5/6) channery silt loam; massive; very firm; 25 percent rock fragments; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum and depth to dense basal till range from 14 to 36 inches. Rock fragments range from 1 to 25 percent in the A and B horizons and 10 to 34 percent in the C horizon. Reaction is extremely acid to strongly acid in the O horizon, very strongly acid to slightly acid in the A horizon and strongly acid to neutral in the B and C horizons.

The A horizon has hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2. Texture is silt loam, loam, very fine sandy loam or their mucky, gravelly, or channery analogs.

The Bg horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 1 or 2. Texture is silt loam, loam, very fine sandy loam or their gravelly or channery analogs.

The Cdg horizon has hue of 2.5Y or 5Y, value of 3 to 6, and chroma of 1 or 2 above 30 inches, and chroma of 1 to 4 below 30 inches. It is silt loam, loam, very fine sandy loam, fine sandy loam or their gravelly or channery analogs.

Massena Series

The Massena series consists of very deep, somewhat poorly drained soils. They formed in loamy till in depressions and drainageways on uplands. Slopes range from 0 to 8 percent.

Massena soils, in most places, are near Amenia, Georgia, Nellis, and Stockbridge soils. Massena soils have redoximorphic features in the upper part of the subsoil that are not in the Amenia, Georgia, Nellis, and Stockbridge soils.

Typical pedon of Massena silt loam, 0 to 3 percent slopes, very stony, in woodland, approximately 1,320 feet north of Myers Road and 2,655 feet west of VT Route 7A, in the town of Shaftsbury, lat. 42 degrees 58 minutes 10.0 seconds N. and long. 73 degrees 13 minutes 03.3 seconds W., NAD 1984:

Oe—0 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 10 inches; very dark gray (10YR 3/1) silt loam; weak fine granular structure; very friable; common fine and medium roots; 10 percent rock fragments; neutral; abrupt wavy boundary.

Bw—10 to 13 inches; olive brown (2.5Y 4/4) loam; weak fine subangular blocky structure; very friable; common fine and medium roots; 10 percent rock fragments; slightly acid; abrupt smooth boundary.

Bg1—13 to 21 inches; dark grayish brown (2.5Y 4.2) loam; weak fine subangular blocky structure; very friable; common medium roots; common medium distinct very dark grayish brown (10YR 3/2) iron depletions and common medium prominent yellowish brown (10YR 5/6) and brown (7.5YR 4/4) masses of iron accumulation; 10 percent rock fragments; neutral; clear smooth boundary.

Bg2—21 to 26 inches; olive gray (5Y 4/2) loam; weak fine subangular blocky structure; very friable; few fine and medium roots; common medium prominent brown (7.5YR 4/4) masses of iron accumulation; 10 percent rock fragments; neutral; clear smooth boundary.

Cg1—26 to 38 inches; dark olive gray (5Y 3/2) gravelly loam; massive; friable; common medium prominent yellowish brown (10YR 5/6) and brown (7.5YR 4/4) masses of iron accumulation; 15 percent rock fragments; neutral; clear smooth boundary.

Cg2—38 to 67 inches; olive gray (5Y 5/2) and olive (5Y 4/3) gravelly loam; massive; firm; common medium prominent yellowish brown (10YR 5/6) and brown (7.5YR 4/4) masses of iron accumulation and very dark grayish brown (10YR 3/2) iron depletions; 15 percent rock fragments; slight effervescence; slightly alkaline.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 36 inches. Rock fragments range from 5 to 34 percent in the A and B horizons and 5 to 50 percent in the C horizon. Reaction is extremely acid to strongly acid in the O horizon, moderately acid to neutral in the A and B horizons, and neutral to moderately alkaline in the C horizon. The depth to carbonates ranges from 20 to 50 inches.

The A horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 1 or 2. Texture is silt loam, loam, fine sandy loam or their gravelly analogs.

The B horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. Texture is loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4. Texture is loam, fine sandy loam or their gravelly or very gravelly analogs.

Monadnock Series

The Monadnock series consists of very deep, well drained soils. They formed in a loamy till underlain by sandy till on knolls, hills, ridges, and mountains. Slopes range from 3 to 50 percent.

Monadnock soils, in most places, are near Berkshire, Colton, and Houghtonville soils. Monadnock soils have more sand in the substratum than Berkshire and Houghtonville soils. Monadnock soils have loamy textures in the subsoil that are not in Colton soils. Monadnock soils are mapped as consociations and in associations with Houghtonville soils in the survey area.

Typical pedon of Monadnock fine sandy loam, 8 to 15 percent slopes, very stony, in woodland, approximately 6,650 feet east of Bart Hill Road and 2,190 feet north of Fayville Branch, in the town of Glastenbury, lat. 43 degrees 01 minutes 01.7 seconds N. and long. 73 degrees 08 minutes 09.1 seconds W., NAD 1984:

Oi—0 to 2 inches; slightly decomposed leaves, needles and twigs.

Oe—2 to 6 inches; moderately decomposed leaves, needles and twigs.

E—6 to 8 inches; reddish gray (5YR 5/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bs1—8 to 13 inches; reddish brown (5YR 4/3) cobbly fine sandy loam; weak fine subangular blocky structure; very friable; many fine and few medium roots; 20 percent rock fragments; weakly smeary; very strongly acid; clear wavy boundary.

Bs2—13 to 21 inches; brown (7.5YR 5/4) cobbly fine sandy loam; weak fine subangular blocky structure; very friable; common fine and medium roots; 25 percent rock fragments; moderately smeary; very strongly acid; clear wavy boundary.

2C1—21 to 31 inches; yellowish brown (10YR 5/4) cobbly loamy sand; massive; very friable; 30 percent rock fragments; strongly acid; clear wavy boundary.

2C2—31 to 71 inches; olive (5Y 5/4) very cobbly loamy coarse sand; massive; very friable; 55 percent rock fragments; moderately acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 15 to 30 inches. Rock fragments range from 1 to 30 percent in the A and B horizons and 5 to 59 percent in the 2C horizon. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A horizon, where present, has hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 1 to 3.

The E horizon has hue of 5YR to 2.5Y, value of 4 to 7, and chroma of 1 or 2.

The A and E horizons are loam, fine sandy loam, sandy loam or their gravelly analogs.

The Bh horizon, where present, has hue of 2.5YR to 7.5YR, with value of 2 or 3 and chroma of 1 or 2.

The Bhs horizon, where present, has hue of 2.5YR to 7.5YR, with value and chroma of approximately 3 or less.

The Bs horizon has hue of 2.5YR to 10YR, value of 3 to 6, and chroma of 3 to 8.

The B horizon is loam, very fine sandy loam, fine sandy loam or their gravelly or cobbly analogs.

The 2C horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 2 to 4. Texture is loamy fine sand, loamy sand, loamy coarse sand, or their gravelly, cobbly, very gravelly, or very cobbly analogs. Lenses or pockets of sand are in some pedons.

Mundal Series

The Mundal series consists of moderately well drained soils. They are moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till on ridges, hills, and mountains. Slopes range from 3 to 35 percent.

Mundal soils, in most places, are near Hogback, Houghtonville, Rawsonville and Wilmington soils. Mundal soils are deeper to bedrock than shallow Hogback soils and moderately deep Rawsonville soils. Mundal soils have a firm or very firm substratum that is not in the Houghtonville soils. Mundal soils do not have redoximorphic features in the upper part of the subsoil that are in the Wilmington soils. Mundal soils are mapped as consociations and in associations with Houghtonville, Rawsonville, and Wilmington soils in the survey area.

Typical pedon of Mundal fine sandy loam, 8 to 15 percent slopes, very stony, in woodland, approximately 5,810 feet south of County Road and 3,300 feet east of Broad Brook, in the town of Pownal, lat. 42 degrees 45 minutes 46.9 seconds N. and long. 73 degrees 08 minutes 36.4 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 3 inches; moderately decomposed leaves and twigs.

A—3 to 6 inches; black (10YR 2/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

E—6 to 7 inches; brown (7.5YR 5/2) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine, fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bhs1—7 to 14 inches; dark brown (7.5YR 3/3) fine sandy loam; moderate fine and medium subangular blocky structure; friable; many fine and medium, and common coarse roots; moderately smeary; 10 percent rock fragments; strongly acid; clear smooth boundary.

Bhs2—14 to 26 inches; dark brown (10YR 3/3) gravelly fine sandy loam; moderate fine and medium subangular blocky structure; friable; many fine and medium roots; weakly smeary; 15 percent rock fragments; strongly acid; abrupt smooth boundary.

Cd—26 to 68 inches; light yellowish brown (2.5Y 6/4) gravelly fine sandy loam; strong thick and very thick platy structure; very firm; few fine roots along horizontal ped faces; common medium and coarse distinct yellowish brown (10YR 5/6) and prominent strong brown (7.5YR 4/6) and few fine and medium prominent brown (7.5YR 4/4) masses of iron accumulation; 25 percent rock fragments; slightly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum and depth to dense basal till range from 20 to 30 inches. Rock fragments range from 1 to 25 percent in the A, E, B, and BC horizons and 5 to 34 percent in the C horizon. Reaction is extremely acid to strongly acid in the O layer and extremely acid to moderately acid in the A, E, B, and BC horizons, and strongly acid to slightly acid in the C horizon.

The A horizon has hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2. Texture is loam, fine sandy loam or their gravelly analogs.

The E horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 1 to 3. Texture is loam, fine sandy loam, sandy loam or their gravelly analogs.

The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 1 to 3. It is strongly or moderately smeary.

The Bhs horizon has hue of 5YR to 10YR, and value and chroma of approximately 3 or less. The horizon is moderately or weakly smeary.

The Bs horizon, where present, has hue of 5YR to 10YR, and value and chroma of 4 or more. The horizon is moderately or weakly smeary.

The Bh, Bhs, and Bs horizons are loam, fine sandy loam, sandy loam or their gravelly analogs. The combined thickness of the Bh, Bhs, and Bs horizons is typically more than 18 inches. If the thickness of the Bh horizon is greater than 4 inches, the combined thickness of the Bh, Bhs and Bs horizons can be less than 18 inches.

The Cd horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4. Texture is loam, fine sandy loam, sandy loam or their gravelly analogs. The horizon is firm or very firm.

Nellis Series

The Nellis series consists of very deep, well drained soils. They formed in calcareous, loamy till on knolls, hills, and ridges. Slopes range from 3 to 50 percent.

Nellis soils, in most places, are near Amenia, Farmington, Galway, Georgia, Massena, Pittsfield, and Stockbridge soils. Nellis soils do not have redoximorphic features in the subsoil that are in Amenia, Georgia, and Massena soils. Nellis soils are deeper to bedrock than the shallow Farmington soils and moderately deep Galway soils. Nellis soils have carbonates within 40 inches that are not in the Pittsfield and Stockbridge soils. Nellis soils are mapped as consociations and in complexes with Farmington and Galway soils in the survey area.

Typical pedon of Nellis silt loam, 8 to 15 percent slopes, in cropland, approximately 1,775 feet south-southwest of the junction of US Route 7 and Beech Road and 220 feet east of US Route 7, in the town of Manchester, lat. 43 degrees 11 minutes 54.8 seconds N. and long. 73 degrees 01 minutes 43.3 seconds W., NAD 1984:

Ap—0 to 8 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; neutral; abrupt smooth boundary.

Bw1—8 to 17 inches; brown (7.5YR 4/4) gravelly silt loam; moderate fine and medium subangular blocky structure; friable; common fine roots; 20 percent rock fragments; neutral; clear wavy boundary.

Bw2—17 to 23 inches; dark yellowish brown (10YR 4/4) gravelly silt loam; moderate medium subangular blocky structure; friable; common fine roots; 20 percent rock fragments; neutral; abrupt wavy boundary.

C1—23 to 31 inches; light olive brown (2.5Y 5/4) gravelly fine sandy loam; moderate medium and coarse subangular blocky structure; friable; few fine roots; common coarse faint dark yellowish brown (10YR 4/4) and prominent yellowish red (5YR 5/8) weathered limestone fragments; 30 percent rock fragments; slight effervescence; neutral; clear smooth boundary.

C2—31 to 65 inches; olive (5Y 5/3) very gravelly fine sandy loam; weak medium and coarse subangular blocky structure; friable; common coarse distinct dark yellowish brown (10YR 4/4) and prominent yellowish red (5YR 5/8) weathered limestone fragments; 45 percent rock fragments; strong effervescence; slightly alkaline.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 15 to 30 inches and depth to carbonates ranges from 15 to 38 inches. Rock fragments range from 5 to 34 percent in the A and B horizons and 5 to 50 percent in the C horizon. Reaction is moderately acid to neutral in the A and B horizons, moderately acid to slightly alkaline in the upper part of the C horizon, and neutral to moderately alkaline below. The O horizon, where present is extremely acid to strongly acid.

The A or Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3. Texture is silt loam, fine sandy loam or their gravelly analogs.

The B horizon has hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 2 to 4. Texture is silt loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 7, and chroma of 2 to 6. Texture is loam, fine sandy loam or their gravelly or very gravelly analogs.

Occum Series

The Occum series consists of very deep, well drained soils. They formed in loamy alluvium on flood plains. Slopes range from 0 to 3 percent.

Occum soils, in most places, are near Copake, Groton, Hero, Limerick, and Pootatuck soils. Occum soils have an irregular decrease in organic matter with depth that does not occur in Copake, Hero, and Groton soils. Occum soils do not have redoximorphic features in the subsoil that are in the Limerick and Pootatuck soils.

Typical pedon of Occum fine sandy loam, 0 to 3 percent slopes, in hayland, approximately 195 feet west of the Wallomsac River and 5,490 feet north of Orebed Road, in the town of Bennington, lat. 42 degrees 55 minutes 09.9 seconds N. and 73 degrees 16 minutes 12.3 seconds W., NAD 1984:

Ap—0 to 10 inches; dark yellowish brown (10YR 3/4) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; moderately acid; abrupt smooth boundary.

Bw—10 to 36 inches; dark yellowish brown (10YR 4/4) fine sandy loam; massive; friable; common fine and medium roots; slightly acid; abrupt smooth boundary.

C—36 to 65 inches; dark yellowish brown (10YR 4/4) loamy fine sand; massive; friable; slightly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 0 to 15 percent in the A and B horizons and 0 to 50 percent in the C horizon. Reaction is very strongly acid to neutral in the A horizon and very strongly acid to slightly acid in the B and C horizons.

The A or Ap horizon has hue of 10YR or 2.5Y, value 3 to 5, and chroma 1 to 4. Texture is very fine sandy loam or fine sandy loam.

The Bw horizon has hue of 10YR or 2.5Y, value 3 to 8 and chroma of 3 to 6. Texture is loam, very fine sandy loam or fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 3 to 7, and chroma 2 to 6. Texture is loamy fine sand to coarse sand or their gravelly and very gravelly analogs.

Peru Series

The Peru series consists of moderately well drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till on hills, ridges, and mountains. Slopes range from 3 to 25 percent.

Peru soils, in most places, are near Berkshire, Cabot, Carlisle, Lyman, and Tunbridge soils. Peru soils have redoximorphic features in the substratum that are not in the Berkshire soils. Peru soils do not have redoximorphic features in the upper part of the subsoil that are in the Cabot soils. Peru soils are formed in mineral material, unlike Carlisle soils, which are formed in organic materials. Peru soils are deeper to bedrock than the shallow Lyman and the moderately deep Tunbridge soils. Peru soils are mapped as consociations and in associations with Berkshire and Cabot soils in the survey area.

Typical pedon of Peru fine sandy loam, 8 to 15 percent slopes, very stony, in woodland, approximately 8,660 feet west of VT Route 100 and 3,830 feet south Flood Brook, in the town of Landgrove, lat. 43 degrees 13 minutes 04.7 seconds N. and long. 72 degrees 51 minutes 18.6 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves, needles and twigs.

Oe—1 to 2 inches; moderately decomposed leaves, needles and twigs.

Ap—2 to 8 inches; dark brown (10YR 3/3) fine sandy loam; weak fine granular structure; very friable; many very fine and fine, and common medium roots; 10 percent rock fragments; strongly acid; clear smooth boundary.

Bs1—8 to 12 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure; very friable; many very fine and fine, and common medium roots; weakly smeary; 10 percent rock fragments; strongly acid; clear smooth boundary.

Bs2—12 to 22 inches; brown (10YR 4/3) fine sandy loam; moderate medium subangular blocky structure; friable; many fine and medium, and common coarse roots; weakly smeary; 10 percent rock fragments; moderately acid; abrupt smooth boundary.

Cd1—22 to 33 inches; light brownish gray (2.5Y 6/2) gravelly fine sandy loam; moderate thick platy structure; very firm; many fine and medium distinct dark yellowish brown (10YR 4/4) and many coarse distinct light olive brown (2.5Y 5/4) masses of iron accumulation; 20 percent rock fragments; moderately acid; abrupt smooth boundary.

Cd2—33 to 67 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; weak thick platy structure; firm; few fine and medium faint dark yellowish brown (10YR 4/4) masses of iron accumulation; 30 percent rock fragments; moderately acid.

The depth to bedrock is more than 60 inches. The thickness of the solum and depth to dense basal till range from 18 to 36 inches. Rock fragments range from 5 to 30 percent in the A and B horizons and 1 to 30 percent in the C horizon. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A or Ap horizon has hue of 5YR to 10YR, with value and chroma of 2 or 3. Texture is loam, fine sandy loam, sandy loam or their gravelly analogs.

The E horizon, where present, has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2. Textures are similar to the A horizon.

The Bh horizon, where present, is less than 4 inches thick. It has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The Bhs horizon, where present, has hue of 5YR to 10YR, with value and chroma of approximately 3 or less.

The Bs horizon has hue of 5YR to 10YR, value of 3 to 5, and chroma of 3 to 8.

The Bh, Bhs and Bs horizons are loam, fine sandy loam, sandy loam or their gravelly analogs. The combined thickness of the Bh, Bhs, and Bs horizons is less than 18 inches.

The BC horizon, where present, has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 6. It has textures similar to the upper B horizons.

The Cd horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4. Texture is loam, fine sandy loam, sandy loam or their gravelly analogs. The horizon is firm or very firm. Some pedons have a friable C horizon less than 8 inches thick, above the Cd horizon, with color and texture similar to the Cd horizon.

Pittsfield Series

The Pittsfield series consists of very deep, well drained soils. They formed in loamy till on knolls, hills, and ridges. Slopes range from 3 to 50 percent.

Pittsfield soils, in most places, are near Farmington, Galway, Georgia, Nellis, and Stockbridge soils. Pittsfield soils are deeper to bedrock than the shallow Farmington and moderately deep Galway soils. Pittsfield soils do not have redoximorphic features in the subsoil that are in the Georgia soils. Pittsfield soils do not have carbonates within 40 inches that are in the Nellis soils. Pittsfield soils do not have a firm substratum that is in Stockbridge soils.

Typical pedon of Pittsfield fine sandy loam, 8 to 15 percent slopes, in cropland, approximately 330 feet east of Middle Pownal Road and 615 feet south of Niles Road, in the town of Bennington, lat. 42 degrees 50 minutes 20.5 seconds N. and long. 73 degrees 11 minutes 06.6 seconds W., NAD 1984:

Ap—0 to 7 inches; brown (10YR 4/3) fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; 5 percent rock fragments; slightly acid; abrupt smooth boundary.

Bw1—7 to 15 inches; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular block structure; friable; common fine and medium roots; 5 percent rock fragments; neutral; clear wavy boundary.

Bw2—15 to 29 inches; dark grayish brown (10YR 4/2) and brown (10YR 4/3) fine sandy loam; moderate medium subangular blocky structure; friable; few fine and medium roots; few fine prominent dark reddish brown (5YR 3/4) manganese stains on faces of peds; 5 percent rock fragments; neutral; clear wavy boundary.

C1—29 to 40 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; 10 percent rock fragments; neutral; clear wavy boundary.

C2—40 to 53 inches; light olive brown (2.5Y 5/4) fine sandy loam; weak medium subangular blocky structure; friable; few fine prominent dark reddish brown (5YR 3/4) manganese stains on faces of peds; 5 percent rock fragments; neutral; clear wavy boundary.

C3—53 to 65 inches; light olive brown (2.5Y 5/4) sandy loam; weak medium platy structure; friable; 5 percent rock fragments; slight effervescence in lower part; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 45 inches. Rock fragments range from 5 to 20 percent in the A and B horizons and 5 to 34 percent in the C horizon. Reaction is very strongly acid to neutral in the A horizon, strongly acid to neutral in the B horizon, and moderately acid to moderately alkaline in the C horizon. The O horizon, where present is extremely acid to strongly acid.

The A or Ap horizon has hue of 10YR, value of 2 to 4, and chroma of 2 or 3. Texture is loam, fine sandy loam or their gravelly analogs.

The Bw horizon has hue of 7.5YR to 2.5Y, value of 4 or 5, and chroma of 2 to 6. Texture is loam, fine sandy loam or their gravelly analogs.

The C horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4. Texture is loam, fine sandy loam, sandy loam or their gravelly analogs. Pockets or lenses of loamy sand or sand are in some pedons.

Pittstown Series

The Pittstown series consists of moderately well drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till on knolls, hills, and ridges. Slopes range from 3 to 25 percent.

Pittstown soils, in most places, are near Brayton, Dutchess, Hubbardton, Macomber, Mansfield, and Taconic soils. Pittstown soils have redoximorphic features in the lower part of the subsoil that are not in Dutchess soils. Pittstown soils do not have redoximorphic features in the upper part of the subsoil that are in the Brayton and Mansfield soils. Pittstown soils are deeper to bedrock than the very shallow Hubbardton, moderately deep Macomber, and shallow Taconic soils.

Typical pedon of Pittstown loam, 8 to 15 percent slopes, in pasture, approximately 575 feet east of Rupert Road and 4,290 feet south of West Road, in the town of Sandgate, lat. 43 degrees 10 minutes 05.2 seconds N. and long. 73 degrees 12 minutes 56.3 seconds W., NAD 1984:

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) loam; weak fine subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; moderately acid: abrupt wavy boundary.

Bw1—6 to 10 inches; yellowish brown (10YR 5/4) loam; moderate medium subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; moderately acid; clear smooth boundary.

Bw2—10 to 18 inches; olive brown (2.5Y 4/4) loam; moderate medium subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; moderately acid; gradual wavy boundary.

Bw3—18 to 23 inches; olive (5Y 4/3) gravelly silt loam; moderate medium subangular blocky structure; firm; few fine roots; common medium distinct dark brown (10YR 3/3) masses of iron accumulation and common medium faint olive gray (5Y 4/2) iron depletions; 15 percent rock fragments; moderately acid; abrupt wavy boundary.

Cd—23 to 65 inches; olive gray (5Y 4/2) gravelly silt loam; massive; firm; common medium distinct dark brown (10YR 3/3), olive brown (2.5Y 4/4) and olive (5Y 5/4) masses of iron accumulation; 30 percent rock fragments; moderately acid.

The depth to bedrock is more than 60 inches. The thickness of the solum and depth to dense basal till ranges from 18 to 30 inches. Rock fragments range from 5 to 25 percent in the A and B horizons and 15 to 34 percent in the C horizon. Reaction is very strongly acid to moderately acid. The O horizon, where present, is extremely acid to strongly acid.

The A or Ap horizon has hue of 10YR, value of 2 to 4, and chroma of 2 or 3. Texture is silt loam, loam, very fine sandy loam or their gravelly or channery analogs.

The upper part of the Bw horizon has hue of 7.5YR to 2.5Y, value of 4 or 5, and chroma of 3 to 6. The lower part of the Bw horizon has hue of 2.5Y or 5Y, value of 4 or 5, chroma of 3 to 6, and mottled. Texture is silt loam, loam, very fine sandy loam or their gravelly or channery analogs.

The Cd horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. Texture is gravelly or channery silt loam, loam, or very fine sandy loam.

Pootatuck Series

The Pootatuck series consists of very deep, moderately well drained soils. They formed in loamy alluvium on flood plains. Slopes range from 0 to 3 percent.

Pootatuck soils, in most places, are near Copake, Fredon, Hero, Limerick, Occum, and Saco soils. Pootatuck soils have redoximorphic features in the lower part of the subsoil that are not in the Copake and Occum soils. Pootatuck soils do not have redoximorphic features in the upper part of the subsoil that are in Fredon, Limerick, and Saco soils. Pootatuck soils do not have carbonates within a depth of 40 inches that are in Hero soils.

Typical pedon of Pootatuck fine sandy loam, 0 to 3 percent slopes, in pasture, approximately 10,450 feet west of US Route 7 and 420 feet south of VT Route 313, in the town of Arlington, lat. 43 degrees 04 minutes 56.5 seconds N., and long. 73 degrees 11 minutes 10.4 seconds W., NAD 1984:

Ap—0 to 10 inches; dark yellowish brown (10YR 3/4) fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; slightly acid; abrupt wavy boundary.

Bw1—10 to 13 inches; olive brown (2.5Y 4/4) fine sandy loam; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; slightly acid; abrupt wavy boundary.

Bw2—13 to 17 inches; olive (5Y 4/4) fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; 5 percent rock fragments; slightly acid; clear smooth boundary.

Bw3—17 to 33 inches; olive (5Y 4/3) fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; common medium faint grayish brown (2.5Y 5/2) iron depletions and common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; 5 percent rock fragments; slightly acid; abrupt wavy boundary.

C1—33 to 45 inches; olive (5Y 4/3) loamy fine sand; weak fine subangular blocky structure; friable; few fine roots; common medium faint grayish brown (2.5Y 5/2) iron depletions and common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; 5 percent rock fragments; slightly acid; abrupt wavy boundary.

C2—45 to 50 inches; olive (5Y 4/3) gravelly loamy fine sand; weak fine subangular blocky structure; friable; common medium faint grayish brown (2.5Y 5/2) iron depletions and common medium prominent brown (7.5YR 4/4) masses of iron accumulation; 20 percent rock fragments; slightly acid; abrupt wavy boundary.

C3—50 to 65 inches; olive (5Y 4/3) loamy fine sand; single grain; loose; common medium distinct very dark grayish brown (10YR 3/2) iron depletions and common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; slightly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 0 to 15 percent in the A and B horizons and 0 to 40 percent in the C horizon. Reaction is very strongly acid to neutral in the A horizon and very strongly acid to slightly acid in the B and C horizons.

The A or Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 to 4. Texture is very fine sandy loam, fine sandy loam or sandy loam.

The Bw horizon has hue of 10YR to 5Y, with value and chroma of 3 to 6. Low chroma redoximorphic features are above 24 inches. Texture is fine sandy loam or sandy loam, with thin strata of loam, very fine sandy loam, or silt loam in some pedons.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 6. Texture is loamy fine sand, fine sand, sand, coarse sand or their gravelly or very gravelly analogs. Thin strata of loamy and/or extremely gravelly textures are in some pedons.

Rawsonville Series

The Rawsonville series consists of moderately deep, well drained soils. They formed in loamy till on ridges, mountains, and hills. Slopes range from 8 to 70 percent.

Rawsonville soils, in most places, are near Glebe, Hogback, Houghtonville, Londonderry, Mundal Stratton, and Wilmington soils. Rawsonville soils are deeper to bedrock than shallow Hogback soils and are shallower to bedrock than the very deep Houghtonville, Mundal, and Wilmington soils. Rawsonville soils have a frigid soil temperature regime and Glebe, Londonderry, and Stratton soils have a cryic soil temperature regime. Rawsonville soils are mapped only in complexes with Hogback and Houghtonville soils and in associations with Hogback, Houghtonville, and Mundal soils in the survey area.

Typical pedon of Rawsonville fine sandy loam, in an area of Rawsonville-Houghtonville complex, 25 to 60 percent slopes, rocky, in woodland, on Bromley Mountain, approximately 7,920 feet west of VT Route 11 and 13,305 feet north of VT Route 30, in the town of Peru, lat. 43 degrees 13 minutes 30.7 seconds N. and long. 72 degrees 56 minutes 18.0 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

Oe—1 to 2 inches; moderately decomposed leaves and twigs.

A—2 to 3 inch; black (10YR 2/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bh—3 to 8 inches; dark brown (7.5YR 3/2) gravelly fine sandy loam; weak fine subangular blocky structure; friable; many fine and medium roots; moderately smeary; 15 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bhs—8 to 20 inches; dark reddish brown (5YR 3/3) gravelly fine sandy loam; weak fine subangular blocky structure; friable; many fine, and common medium and coarse roots; moderately smeary; 15 percent rock fragments; strongly acid; abrupt wavy boundary.

BC—20 to 25 inches; dark grayish brown (2.5Y 4/2) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine, medium and coarse roots; 15 percent rock fragments; strongly acid; abrupt wavy boundary.

R—25 inches; schist bedrock.

The depth to bedrock and thickness of the solum range from 20 to 40 inches. Rock fragments range from 0 to 20 percent in the A and E horizons and the upper part of the B horizon and 5 to 34 percent in the lower part of the B horizon and BC horizon. Reaction is extremely acid to strongly acid in the O horizon and extremely acid to moderately acid below.

The A horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. Texture is silt loam, loam, fine sandy loam, sandy loam or their gravelly analogs.

The E horizon, where present, has hue of 5YR to 10YR, value of 3 to 6, and chroma of 1 to 3. Texture is silt loam, loam, fine sandy loam, sandy loam or their gravelly analogs.

The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 10YR, with value and chroma of approximately 3 or less.

The Bs horizon, where present, has hue of 5YR to 10YR, with value and chroma of 4 or more.

The B horizons are silt loam, loam, fine sandy loam, sandy loam or their gravelly analogs. The B horizons are weakly or moderately smeary. Combined thickness of Bh, Bhs and Bs horizons is typically more than 16 inches. If the thickness of the Bh horizon is more than 4 inches, then the combined thickness of the Bh, Bhs and Bs horizon can be less than 16 inches.

The BC horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4. Texture is fine sandy loam, sandy loam or their gravelly analogs.

Bedrock is schist, gneiss or phyllite.

Raynham Series

The Raynham series consists of very deep, poorly drained soils. They formed in silty glaciolacustrine deposits on stream terraces and in depressions and drainageways. Slopes range from 0 to 3 percent.

Raynham soils, in most places, are near Belgrade, Copake, Hartland, Limerick, and Saco soils. Raynham soils have redoximorphic features in the upper part of the subsoil that are not in Belgrade, Copake, and Hartland soils. Raynham soils have a regular decrease in organic matter that is not in the Limerick and Saco soils.

Typical pedon of Raynham silt loam, 0 to 3 percent slopes, in hayland, approximately 4,085 feet north of Barber Pond Road and 250 feet east of US Route 7, in the town of Pownal, lat. 42 degrees 48 minutes 20.0 seconds N. and long. 73 degrees 13 minutes 03.7 seconds W., NAD 1984:

Ap—0 to 8 inches; brown (10YR 4/3) silt loam; weak medium granular structure; very friable; common fine roots; slightly acid; abrupt wavy boundary.

Bw—8 to 10 inches; olive brown (2.5Y 4/4) silt loam; weak fine subangular blocky structure; very friable; common fine roots; common fine distinct yellowish brown (10YR 5/6) and prominent red (2.5YR 5/6) masses of iron accumulation and common fine distinct olive gray (5Y 4/2) and dark grayish brown (2.5Y 4/2) iron depletions; neutral; clear smooth boundary.

Bg—10 to 16 inches; olive gray (5Y 4/2) silt loam; massive; friable; common fine roots; many medium prominent dark yellowish brown (10YR 4/4) and distinct olive brown (2.5Y 4/4) masses of iron accumulation; slightly acid; abrupt wavy boundary.

Cg—16 to 65 inches; olive gray (5Y 4/2) silt; massive; firm; common fine prominent dark yellowish brown (10YR 4/4) and yellowish brown (10YR 5/6) and distinct olive brown (2.5Y 4/4) masses of iron accumulation; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 16 to 40 inches. Rock fragments range from 0 to 2 percent. Reaction is strongly acid to neutral in the A and B horizons and moderately acid to slightly alkaline in the C horizon.

The Ap horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 2 or 3. Texture is silt loam or very fine sandy loam. Some pedons have a thin A horizon.

The B horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 4. At least one subhorizon has a dominant chroma of 2 or less within 20 inches of the surface. Texture is silt, silt loam or very fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 6. Texture is silt, silt loam or very fine sandy loam, and commonly stratified or varved. Thin layers of fine sand, sand, gravelly sand or silty clay loam are in some pedons.

Saco Series

The Saco series consists of very deep, very poorly drained soils. They formed in silty alluvium on flood plains. Slopes range from 0 to 2 percent.

Saco soils, in most places, are near Adrian, Carlisle, Limerick, Pootatuck and Raynham soils. Saco soils do not have organic materials greater than 16 inches thick that are in Adrian and Carlisle soils. Saco soils have redoximorphic features in the surface layer that are not in Limerick, Pootatuck, and Raynham soils. Saco soils are mapped only in an undifferentiated unit with Adrian soils in the survey area.

Typical pedon of Saco silt loam, in an area of Adrian and Saco soils, 0 to 2 percent slopes, in a swamp on a flood plain along the Batten Kill, approximately 2,500 feet north of Richville Road and 5,240 feet east of US Route 7, in the town of Manchester, lat. 43 degrees 08 minutes 19.8 seconds N. and 73 degrees 04 minutes 18.9 seconds W., NAD 1984:

A—0 to 7 inches; very dark gray (10YR 3/1) silt loam; weak fine granular structure; very friable; common very fine and fine roots; few fine prominent brown (7.5YR 4/4) and dark reddish brown (5YR 3/3) masses of iron accumulation; 5 percent rock fragments; moderately acid; abrupt wavy boundary.

Cg1—7 to 10 inches; olive gray (5Y 4/2) silt loam; weak fine subangular blocky structure; very friable; few fine roots; common fine and medium prominent dark yellowish brown (10YR 4/4) and distinct dark brown (10YR 3/3) and olive brown (2.5Y 4/4) masses of iron accumulation; 5 percent rock fragments; moderately acid; abrupt smooth boundary.

Cg2—10 to 22 inches; very dark gray (5Y 3/1) silt loam; weak fine subangular blocky structure; very friable; common fine and medium distinct prominent olive (5Y 5/6) and distinct olive (5Y 5/3 and 5Y 4/4) masses of iron accumulation; 5 percent rock fragments; slightly acid; abrupt wavy boundary.

Cg3—22 to 41 inches; gray (N 6/) very fine sandy loam; weak fine subangular blocky structure; very friable; common medium prominent olive (5Y 5/6, 5Y 5/3 and 5Y 4/4) masses of iron accumulation; 5 percent rock fragments; slightly acid; abrupt smooth boundary.

2Cg—41 to 65 inches; gray (5Y 6/1) gravelly coarse sand; single grain; loose; common fine and medium prominent dark reddish brown (5YR 3/3), brown

(7.5YR 4/4), yellowish brown (10YR 5/6) and olive (5Y 5/6) masses of iron accumulation; 25 percent rock fragments; slightly acid.

The depth to bedrock is more than 60 inches. Depth to sand or sand and gravel is greater than 40 inches. Rock fragments range from 0 to 5 percent above 40 inches, and 0 to 40 percent below 40 inches. Reaction is strongly acid to neutral in the A horizon and upper part of the C horizon and moderately acid to neutral in the lower part of the C horizon.

The A horizon has hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 to 3. Texture is silt loam, very fine sandy loam or their mucky analogs.

The C horizon is neutral or has hue of 10YR to 5Y, value of 3 to 6, and chroma of 0 to 2. Texture is silt loam or very fine sandy loam to a depth of 40 inches or more and loamy fine sand to very gravelly coarse sand in the lower part.

Stockbridge Series

The Stockbridge series consists of very deep, well drained soils. They formed in loamy till on knolls, hills, and ridges. Slopes range from 2 to 25 percent.

Stockbridge soils, in most places, are near the Farmington, Galway, Georgia, Massena, Nellis, and Pittsfield soils. Stockbridge soils are deeper to bedrock than the moderately deep Galway soils and shallow Farmington soils. Stockbridge soils do not have redoximorphic features in the subsoil that are in Georgia and Massena soils. Stockbridge soils do not have carbonates within 40 inches that are in Nellis soils. Stockbridge soils have a firm substratum that is not in Pittsfield soils.

Typical pedon of Stockbridge loam, 8 to 15 percent slopes, in hayland, approximately 1,200 feet east of White Creek Road and 2,945 feet north of VT Route 67, in the town of Shaftsbury, lat. 42 degrees 56 minutes 32.7 seconds N. and long. 73 degrees 15 minutes 08.3 seconds W., NAD 1984:

Ap—0 to 9 inches; very dark grayish brown (10YR 3/2) loam; light brownish gray (2.5Y 6/2) dry; moderate medium granular structure; friable; common fine and medium roots; 10 percent rock fragments; neutral; abrupt wavy boundary.

Bw1—9 to 20 inches; dark yellowish brown (10YR 4/4) loam; weak medium subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; neutral; gradual wavy boundary.

Bw2—20 to 24 inches; olive brown (2.5Y 4/4) loam; weak medium subangular blocky structure; friable; common fine and medium roots; 10 percent rock fragments; neutral; clear wavy boundary.

C1—24 to 36 inches; olive brown (2.5Y 4/4) gravelly loam; massive; firm; few fine roots; 20 percent rock fragments; neutral; clear smooth boundary.

C2—36 to 65 inches; olive (5Y 4/3) gravelly loam; massive; firm; few very fine roots; 20 percent rock fragments; neutral.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 20 to 40 inches. Rock fragments range from 5 to 34 percent. Reaction is strongly acid to neutral in the A horizon, moderately acid to neutral in the B horizon and in the C horizon to a depth of 40 inches, and moderately acid to moderately alkaline below 40 inches. The O horizon, where present, is extremely acid to strongly acid.

The Ap horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 3. Texture is silt loam, loam, very fine sandy loam or their gravelly analogs. A thin A horizon is present in some pedons.

The Bw horizon has hue of 10YR or 2.5Y in the upper part and 10YR to 5Y in the lower part, with value of 4 to 6, and chroma of 3 to 6. Texture is silt loam, loam or their gravelly analogs.

The C horizon has hue of 10YR to 5Y, value of 3 to 6, and chroma of 2 to 4. Texture is silt loam, loam or their gravelly analogs.

Stratton Series

The Stratton series consists of shallow, well drained soils. They formed in thin, loamy till on mountains at the highest elevations in the survey area. Slopes range from 15 to 60 percent.

Stratton soils, in most places, are near the Glebe, Hogback, Londonderry, and Rawsonville soils. Stratton soils have a cryic soil temperature regime and Hogback and Rawsonville soils have a frigid soil temperature regime. Stratton soils are shallower to bedrock than the moderately deep Glebe soils and deeper to bedrock than very shallow Londonderry soils. Stratton soils are mapped only in complexes with Glebe and Londonderry soils and in associations with Glebe soils in the survey area.

Typical pedon of Stratton channery silt loam, in an area of Glebe-Stratton-Londonderry complex, 25 to 60 percent slopes, very rocky, on the summit of Mt. Equinox, approximately 10,450 feet west of West Road and 9,295 feet northwest of VT Route 7A, in the town of Manchester, lat. 43 degrees 10 minutes 02.8 seconds N. and 73 degrees 06 minutes 39.0 seconds W., NAD 1984:

Oi—0 to 1 inch; slightly decomposed needles, moss, and twigs.

A—1 to 5 inches; black (N 2/0) channery silt loam; weak fine granular structure; very friable; many very fine and fine, and common medium roots; 25 percent rock fragments; extremely acid; abrupt smooth boundary.

E—5 to 7 inches; brown (7.5YR 5/2) very channery silt loam; weak fine subangular blocky structure; very friable; many fine and common medium roots; 40 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bh—7 to 10 inches; dark reddish brown (5YR 3/2) very channery silt loam; weak fine and medium subangular blocky structure; very friable; many fine and few medium roots; strongly smeary; 40 percent rock fragments; extremely acid; abrupt smooth boundary.

Bhs—10 to 15 inches; dark reddish brown (5YR 3/3) very channery silt loam; weak medium subangular blocky structure; very friable; common fine roots; moderately smeary; 50 percent rock fragments; very strongly acid; clear smooth boundary.

Bs—15 to 20 inches; reddish brown (5YR 4/4) very channery silt loam; weak medium and coarse subangular blocky structure; very friable; common fine roots; moderately smeary; 55 percent rock fragments; extremely acid; abrupt wavy boundary.

R—20 inches; schist bedrock.

The thickness of the solum and depth to bedrock range from 10 to 20 inches. Rock fragments range from 25 to 59 percent. Reaction is extremely acid to strongly acid.

The A horizon is neutral or has hue of 5YR to 10YR, value of 2 or 3, and chroma of 0 to 2. The horizon is gravelly, channery, very gravelly, or very channery silt loam, loam or fine sandy loam.

The E horizon is neutral or has hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 0 to 2. Texture is gravelly, channery, very gravelly, or very channery silt loam, loam, or fine sandy loam.

The Bh horizon is neutral or has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 0 to 2.

The Bhs horizon has hue of 2.5YR to 7.5YR, with value and chroma of approximately 3 or less.

The Bs horizon has hue of 2.5YR to 7.5YR, with value and chroma of 4 or more.

The B horizons are gravelly, channery, very gravelly, or very channery silt loam, loam or fine sandy loam and strongly or moderately smeary.

Bedrock is phyllite, schist or gneiss.

Taconic Series

The Taconic series consists of shallow, somewhat excessively drained soils. They formed in thin, loamy till on hills, mountains, and ridges. Slopes range from 8 to 70 percent.

Taconic soils, in most places, are near Brayton, Dutchess, Hubbardton, Macomber, Mansfield, and Pittstown soils. Taconic soils are shallower to bedrock than the very deep Brayton, Dutchess, Mansfield, and Pittstown soils, and moderately deep Macomber soils. Taconic soils are deeper to bedrock than very shallow Hubbardton soils. Taconic soils are mapped only in complexes with Hubbardton and Macomber soils in the survey area.

Typical pedon of Taconic channery silt loam, in an area of Macomber-Taconic complex, 25 to 60 percent slopes, rocky, in woodland, approximately 710 feet south of West Road and 2,185 feet west of Rupert Road, in the town of Sandgate, lat. 43 degrees 10 minutes 38.6 seconds N. and long. 73 degrees 13 minutes 17.0 seconds W., NAD 1984:

Oe—0 to 1 inch; moderately decomposed leaves and twigs.

A—1 to 3 inches; very dark grayish brown (10YR 3/2) channery silt loam; weak fine granular structure; very friable; many very fine and fine, and common medium roots; 25 percent rock fragments; very strongly acid; clear wavy boundary.

Bw1—3 to 9 inches; strong brown (7.5YR 5/6) very channery silt loam; moderate fine and medium subangular blocky structure; friable; many fine, medium and coarse roots; 40 percent rock fragments; very strongly acid; clear wavy boundary.

Bw2—9 to 13 inches; yellowish brown (10YR 5/6) very channery silt loam; moderate fine and medium subangular blocky structure; friable; many fine, medium and coarse roots; 55 percent rock fragments; strongly acid; abrupt wavy boundary.

R—13 inches; slate bedrock.

The depth to bedrock and thickness of the solum range from 10 to 20 inches. Rock fragments range from 10 to 35 percent in the A horizon, 30 to 59 percent in the B horizon, and are more than 35 percent in the particle size control section. Reaction is extremely acid to strongly acid in the A horizon and very strongly acid to strongly acid in the B horizon.

The A horizon has hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 3. Texture is silt loam, loam or their channery or very channery analogs.

The Bw horizon has hue of 7.5YR to 5Y, value of 3 to 5, and chroma of 4 to 6, with hue of 7.5YR occurring in the upper part. Texture is silt loam, loam or their channery or very channery analogs.

The C horizon, where present, has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. Texture is similar to the B horizon.

The bedrock is slate, phyllite or schist.

Tunbridge Series

The Tunbridge series consists of moderately deep, well drained soils. They formed in loamy till on knolls, hills, ridges, and mountains. Slopes range from 3 to 70 percent.

They are associated with Berkshire, Lyman, and Peru soils. Tunbridge soils are shallower to bedrock than the very deep Berkshire and Peru soils and are deeper to bedrock than the shallow Lyman soils. Tunbridge soils are mapped only in complexes with Berkshire and Lyman soils and in associations with Berkshire soils in the survey area.

Typical pedon of Tunbridge fine sandy loam, in an area of Tunbridge-Berkshire complex, 8 to 15 percent slopes, rocky, in woodland, approximately 6,125 feet southeast of VT Route 11 and 3,285 feet southwest of Winhall Hollow Road, in the town of Peru, lat. 43 degrees 12 minutes 26.8 seconds N. and long. 72 degrees 54 minutes, 11.6 seconds W., NAD 1984:

Oe—0 to 1 inch; moderately decomposed leaves, needles and twigs.

A—1 to 3 inches; very dark grayish brown (10YR 3/2) fine sandy loam; weak fine and medium granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bs1—3 to 11 inches; brown (7.5YR 4/4) fine sandy loam; moderate medium subangular blocky structure; very friable; many fine and common medium roots; moderately smeary; 10 percent rock fragments; strongly acid; clear smooth boundary.

Bs2—11 to 16 inches; dark yellowish brown (10YR 4/4) fine sandy loam; moderate medium subangular blocky structure; friable; common fine and medium roots; weakly smeary; 10 percent rock fragments; strongly acid; abrupt smooth boundary.

BC—16 to 24 inches; dark grayish brown (10YR 4/2) gravelly fine sandy loam; moderate medium subangular blocky structure; friable; few fine and medium roots; 15 percent rock fragments; moderately acid; abrupt wavy boundary.

R—24 inches; schist bedrock.

The depth to bedrock ranges from 20 to 40 inches. The thickness of the solum ranges from 14 to 38 inches. Rock fragments range from 5 to 34 percent. Reaction is extremely acid to strongly acid in the O horizon, extremely acid to moderately acid in the A, E, B, and BC horizons, and strongly acid to slightly acid in the C horizon.

The A horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 4. An Ap horizon is present in some pedons, with chroma of 2 to 4. Texture is loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly analogs. Silt loam or gravelly silt loam textures are in some pedons.

The E horizon, where present, has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bh horizon, where present, is less than 4 inches thick. It has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The Bs horizon has hue of 5YR to 10YR, with value and chroma of 4 or more.

The Bhs horizon, where present, has hue of 5YR to 10YR, with value and chroma of approximately 3 or less.

The B horizons are loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly analogs. Silt loam or gravelly silt loam textures are in some pedons. Combined thickness of the Bhs and Bs horizons ranges from 4 to 16 inches.

The BC horizon, where present, has hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 3 to 8. Texture is loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly analogs. Silt loam or gravelly silt loam textures are in some pedons.

The C horizon, where present, has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 6. Texture is loam, very fine sandy loam, fine sandy loam, sandy loam or their gravelly analogs. Silt loam or gravelly silt loam textures are in some pedons.

Bedrock is schist, gneiss, granite, or phyllite bedrock.

Udifluvents

Udifluvents consists of very deep, somewhat poorly drained to excessively drained soils. They formed in sandy and loamy alluvial material on flood plains. Slopes range from 0 to 3 percent.

Udifluvents, in most places, are near Limerick, Occum, and Pootatuck soils. Udifluvents have more rock fragments in the upper part of the soil than Limerick, Occum, and Pootatuck soils.

Because of the variability of Udifluvents, a typical profile is not given. These soils have a surface layer 3 to 6 inches thick underlain by stratified alluvial material high in rock fragments. The depth

to bedrock is more than 60 inches. Rock fragments range from 35 to 75 percent. Reaction is strongly acid to neutral.

Udipsamments

Udipsamments consists of very deep, moderately well drained to excessively drained soils formed in sandy material. These soils are in areas that have been altered by earthmoving equipment for the purpose of sand and gravel extraction, smoothing and leveling in preparation for construction, or for solid waste disposal. Slopes range from 0 to 8 percent.

Udipsamments, in most places, are near Copake, Groton, Udorthents and Windsor soils. Udipsamments do not have subsoil structure and color characteristic of the Copake, Groton, and Windsor soils. Udipsamments have sandier textures than Udorthents. Udipsamments are mapped only in an undifferentiated unit with Udorthents in the survey area.

Because of the variability of Udipsamments, a typical profile is not given. These soils have a surface layer 0 to 6 inches thick underlain by sandy or gravelly material. The depth to bedrock is more than 60 inches. Rock fragments range from 0 to 75 percent. Reaction is extremely acid to moderately alkaline.

Udorthents

Udorthents consists of very deep, moderately well drained to excessively drained soils formed in loamy material. These soils are in areas that have been altered by earthmoving equipment for the purpose of extracting loamy fill material, smoothing and leveling in preparation for construction, or for solid waste disposal. Slopes range from 0 to 8 percent.

Udorthents, in most places, are near Georgia, Pittsfield, Stockbridge, and Udipsamments soils. Udorthents do not have subsoil structure and color characteristics of the Georgia, Pittsfield, and Stockbridge soils. Udorthents have loamy textures and Udipsamments have sandy textures. Udorthents are mapped only in an undifferentiated unit with Udipsamments in the survey area.

Because of the variability of Udorthents, a typical profile is not given. These soils have a surface layer 0 to 6 inches thick, underlain by a loamy material. The depth to bedrock is more than 60 inches. Rock fragments range from 0 to 75 percent. Reaction is extremely acid to moderately alkaline.

Wilmington Series

The Wilmington series consists of poorly drained soils. They are shallow or moderately deep to dense basal till and very deep to bedrock. They formed in dense, loamy till in depressions on uplands. Slopes range from 0 to 8 percent.

Wilmington soils, in most places, are near Hogback, Houghtonville, Mundal, and Rawsonville soils. Wilmington soils are deeper to bedrock than the shallow Hogback and moderately deep Rawsonville soils. Wilmington soils have redoximorphic features in the upper part of the subsoil that are not in the Houghtonville and Mundal soils. Wilmington soils are mapped as consociations and in associations with Wilmington soils in the survey area.

Typical pedon of Wilmington fine sandy loam, 0 to 8 percent slopes, very stony, in woodland, approximately 6,390 feet west of the junction of VT Routes 8 and 100 and 425 feet north of the West Branch of the Deerfield River, in the town of Readsboro, lat. 42 degrees 49 minutes 46.2 seconds N. and long. 73 degrees 00 minutes 39.2 seconds W., NAD 1984:

Oe—0 to 2 inches; moderately decomposed leaves, needles and twigs.

A—2 to 5 inches; black (N 2/) fine sandy loam; weak medium granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

E—5 to 6 inches; dark gray (5YR 4/1) fine sandy loam; weak medium granular structure; very friable; many very fine and fine roots; 10 percent rock fragments; very strongly acid; abrupt smooth boundary.

Bh1—6 to 12 inches; black (5YR 2.5/1) fine sandy loam; weak medium granular structure; friable; many fine and medium roots; many medium distinct dark reddish brown (5YR 3/4) masses of iron accumulation; moderately smeary; 10 percent rock fragments; very strongly acid; clear smooth boundary.

Bh2—12 to 20 inches; black (5YR 2.5/1) fine sandy loam; weak medium granular structure; friable; common fine, medium and coarse roots; common medium distinct very dark brown (10YR 2/2) iron depletions; moderately smeary; 10 percent rock fragments; very strongly acid; clear smooth boundary.

Bhs—20 to 26 inches; dark brown (10YR 3/3) fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; many medium faint very dark grayish brown (10YR 3/2) iron depletions and common fine faint dark brown (7.5YR 3/4) masses of iron accumulation; weakly smeary; 12 percent rock fragments; very strongly acid; clear smooth boundary.

Cdg—26 to 67 inches; olive gray (5Y 5/2) gravelly fine sandy loam; massive; very firm; many medium distinct olive (5Y 5/4) and many medium prominent dark yellowish brown (10YR 4/4) masses of iron accumulation; 25 percent rock fragments; strongly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 12 to 24 inches. Reaction is extremely acid to moderately acid in the A, E, B, and BC horizons, and strongly acid to slightly acid in the C horizon. Rock fragments range from 5 to 34 percent.

The A horizon is neutral or has hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 0 to 2. Texture is silt loam, loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2. Texture is fine sandy loam, sandy loam or their gravelly analogs.

The Bh horizon has hue of 5YR to 10YR, value of 2 to 3, and chroma of 1 or 2. It is moderately or weakly smeary.

The Bhs horizon has hue of 7.5YR or 10YR, with value and chroma of approximately 3 or less.

The BC horizon, where present has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2.

The B horizons are fine silt loam, loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

The Cdg horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2. Texture is silt loam, loam, very fine sandy loam, fine sandy loam or their gravelly analogs.

Windsor Series

The Windsor series consists of very deep, excessively drained soils. They formed in sandy glaciofluvial deposits on stream terraces and knolls and ridges. Slopes range from 0 to 60 percent.

Windsor soils, in most places, are near Belgrade, Copake, Groton, Hartland, and Hero soils. Windsor soils have less rock fragments in the substratum than Copake, Groton, and Hero soils. Windsor soils have more sand in the solum than Belgrade and Hartland soils.

Typical pedon of Windsor loamy fine sand, 8 to 15 percent slopes, in hayland, approximately 500 feet south of Niles road and 1,540 feet east of Middle Pownal Road, in the town of Bennington, lat. 42 degrees 50 minutes 16.0 seconds N. and long. 73 degrees 10 minutes 51.8 seconds W., NAD 1984:

Ap—0 to 4 inches; very dark grayish brown (10YR 3/2) loamy fine sand; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; strongly acid; abrupt smooth boundary.

Bw1—4 to 8 inches; dark yellowish brown (10YR 4/4) loamy fine sand; weak fine granular structure; very friable; common fine and medium roots; 5 percent rock fragments; strongly acid; clear wavy boundary.

Bw2—8 to 13 inches; yellowish brown (10YR 5/6) loamy fine sand; weak medium granular structure; very friable; common fine and medium roots; 5 percent rock fragments; strongly acid; clear wavy boundary.

Bw3—13 to 22 inches; olive brown (2.5Y 4/4) loamy fine sand; weak medium granular structure; very friable; few fine and medium roots; 5 percent rock fragments; strongly acid; clear wavy boundary.

C—22 to 65 inches; olive gray (5Y 4/2) fine sand; single grain; loose; 5 percent rock fragments; strongly acid.

The depth to bedrock is more than 60 inches. The thickness of the solum ranges from 18 to 36 inches. Rock fragments range from 0 to 10 percent in the A, E, and B horizons and 0 to 15 percent in the C horizon. Reaction is very strongly acid to moderately acid in the A, E, and B horizons and very strongly acid to slightly acid in the C horizon.

The Ap horizon has value of 3 or 4, and chroma of 2 to 4. The A horizon, where present, has hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 to 3. Texture is loamy fine sand or loamy sand.

The E horizon, where present, has hue of 10YR, value of 4 to 6, and chroma of 1 or 2.

The upper part of the Bw horizon has hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8. The lower part has hue of 7.5YR to 5Y, value of 4 to 7, and chroma of 3 to 6. Texture is loamy fine sand or loamy sand.

The C horizon has hue of 7.5YR to 5Y, value of 4 to 7, and chroma of 2 to 6. Texture is loamy fine sand, loamy sand, fine sand or sand.

Formation of the Soils

The paragraphs that follow describe the factors of soil formation, relate them to the formation of the soils in the survey area, and explain the processes of soil formation.

Factors of Soil Formation

Soil forms through the interaction of five major factors: the nature of the parent material; the climate under which the parent material has existed since its accumulation or deposition; the local plant and animal life; the relief, or the lay of the land; and the length of time these other factors have had to interact (Jenny, 1941).

The physical, chemical, and mineralogical composition of the parent material affects the type of soil that will eventually form. Climate and plant and animal life are the active forces in soil formation. They change the parent material into soil, which has genetically-related layers called horizons. The effects of climate and plant and animal life are conditioned by relief. Relief influences soil development mainly by its effect on water, either causing it to accumulate, as in depressions, or to runoff rapidly, such as on steep hillsides. Finally, a period of time is necessary for the development of the parent material into a soil profile with differentiated horizons.

Parent Material

Parent material is the mineral or organic solids from which a soil forms. Most of the parent material of the soils in Bennington County is unconsolidated material that was deposited by glaciers or by meltwater that preceded the glaciers. Even though most of the parent material in the county is of glacial origin, its properties vary greatly, sometimes within small areas, depending on the source of the materials and how they were deposited. The parent materials are till, glacial outwash, lacustrine deposits, alluvium, and organic deposits.

Parent material establishes the chemical and mineralogical baseline of a soil. For example, till in the central part of the county is calcareous. In other areas, it is acidic. This difference is related to the presence of limestone bedrock in the central part of the county.

Till is material laid down directly beneath the glacial ice. It is unsorted, with particles of different sizes mixed together. The gravel-sized pebbles in till commonly have sharp corners, indicating that they have not been worn by water. Amenia, Berkshire and Dutchess soils are three examples of soils formed in till. They typically have loamy textures and moderately developed structure in the subsoil.

Outwash deposits are material that was sorted and deposited by flowing glacial meltwater. The size of the particles that make up outwash material varies according to the velocity of the stream in which they were suspended. As the velocity lessened, the coarser particles were deposited first. Slower-moving water carried only the finer particles such as very fine sand, silt, and clay. Outwash deposits generally consist of layers, or strata, of coarser soil particles, such as sand and gravel, and they are somewhat sorted. Colton, Copake and Groton soils are three examples of soils formed in outwash deposits.

Lacustrine deposits originate in glacial lakes. This material is comprised mainly of finer soil particles, such as very fine sand, silt and clay. In that sense, it is well-sorted material. In Bennington County, soils formed in lacustrine deposits typically have silt loam textures. Belgrade, Hartland, and Raynham soils are three examples of soils formed in lacustrine deposits.

Alluvium is material deposited by flood waters of streams in recent times. This material ranges in texture from silt loam to sand and gravel, depending on the velocity of the water that deposited it. Limerick, Occum and Pootatuck soils are three examples of soils formed in alluvial deposits.

Organic deposits consist primarily of plant remains. Water collects in depressions on outwash terraces, flood plains, and uplands. When the grasses, sedges and other wetland plants growing around the edges of these small ponds die, their remains accumulate in the water. Because of the wetness, the accumulated plant material decomposes at a much slower rate than if it was exposed to the atmosphere. As time goes on, water-tolerant trees and shrubs begin to populate these areas. As these trees die, their residues become part of the organic accumulation. Eventually, the ponds fill in with organic material and develop into areas of organic soils. Carlisle soils are an example of a soil formed in organic material.

Plant and Animal Life

Green plants have been the principal organisms influencing the soils in Bennington County, but bacteria, fungi, earthworms, mammals, reptiles, birds and, more recently, the activities of humans have also been important. The chief contribution of plant and animal life is the addition of organic matter, nitrogen, and other nutrients to the soil. The kind of organic material on and in the soil depends on the kinds of plants that grew on the soil. The remains of these plants accumulate on the surface, decay, adding organic matter to the soil. Roots of the plants provide channels for downward movement of water through the soil and also add organic matter as they decay. Bacteria in the soil help break down the organic matter so that it can be used by growing plants.

The influence of humans in soil formation is visible in the large earth-moving projects present throughout the county, including airport runway and highway developments, landfills, quarries and sand and gravel extraction sites. In addition, accelerated soil erosion is a result of improper agricultural and construction practices. Artificial soil drainage and altering the native vegetation are other activities that affect the processes of soil formation.

Climate

Climate influences the kind of plant and animal life present in the soils, the temperature at which chemical reactions occur in the soils, and the amount of water available for weathering minerals and leaching various soil compounds. Through its influence on soil temperature, climate affects the rate of chemical and biological activities in the soil. In cool areas and in areas saturated for long periods, the rate of biological activity is low and organic matter accumulates.

The climate in Bennington County varies with elevation. There are three soil temperature regimes in the county, as defined in Soil Taxonomy (USDA, 1999). Soils in the valleys at low elevations are warmer and have a mesic soil temperature regime. Two examples are the Occum and Windsor soils along the Battenkill. Soils are cooler in the Green Mountains and at higher elevations in the Taconic Mountains and have a frigid soil temperature regime. Berkshire, Lyman and Tunbridge soils are three examples of these cooler soils. At the very highest elevations in the county, generally above 3,000 feet, the soils have a cryic soil temperature regime. Glebe, Londonderry, and Stratton soils are found on these high mountain landscapes.

Relief

Relief, or topography, has a marked influence on the soils of Bennington County, through its influence on drainage, erosion, plant cover, and soil temperature. In Bennington County, slopes range from 0 to 70 percent. Natural soil drainage ranges from excessively drained to well drained on hilltops and mountaintops to poorly drained and very poorly drained in depressions.

Relief influences the formation of soils by affecting runoff and drainage. Runoff is greatest on the steeper slopes. In less sloping terrain, the soils drain more slowly. In low areas, water may be temporarily ponded. Drainage, and the degree of aeration in the soil, strongly influences the color of soils through its affect on certain chemicals and minerals in the soil, in particular iron. In soils that are well aerated, oxidized iron compounds give them a bright reddish brown color. In poorly aerated soils, different iron compounds in the soil impart a dull olive gray color. For example, Nellis and Massena soils formed in similar parent material under similar climate and vegetation. Nellis soils are on ridges and back slopes. They are well drained, well aerated, and exhibit bright colors in the soil profile. Massena soils are in depressions. They are somewhat poorly to poorly drained, poorly aerated, and have dull, grayish colors in the soil profile. Soils that are well aerated during one part of the year and poorly aerated during another part of the year, due usually to a seasonally fluctuating high water table, are commonly mottled with both bright and dull colored patches within and below the zone of the fluctuating water table.

Time

A significant amount of time is required for the processes of soil formation to develop distinct horizons from parent material. The differences in the length of time various parent materials have been in place is commonly reflected in the degree of development in the soil profile. Some soil characteristics develop rapidly, others more slowly.

The soils in Bennington County range from young to mature, though none are old, in the pedological sense of the word. The generally accepted time frame since the last glacier receded is about nine to ten thousand years. The glacial deposits have been altered by soil forming factors for a period of time, sufficient to allow horizons to develop. Berkshire soils, which formed in till on uplands, are mature soils with distinct horizons. Soils formed in recent alluvial sediments have not been in place long enough for distinct horizons to develop. Pootatuck soils, which formed in alluvium on flood plains, are considered to be young soils.

Processes of Soil Formation

The many processes that lead to the development of soil horizons from unconsolidated parent material is collectively referred to as soil genesis. The physical, chemical, and biological properties of the various soil horizons are termed soil morphology.

Several processes are involved in the development of the soils of Bennington County: (1) accumulation of organic matter; (2) leaching of calcium carbonate and other bases; (3) chemical changes, such as oxidation, reduction, and hydration and the transfer or losses of the products of these changes; and (4) formation and translocation of silicate clay minerals and iron, aluminum and organic compounds. In most of the soils in the county, more than one of these processes has been active in the development of soil horizons.

Certain processes tend to modify, retard, or reverse the effects of soil-forming processes. The most important of these are: (1) the mixing of soils by windthrow, animal activity, or frost action; (2) the deposition of fresh soil material; and (3) the recycling of nutrients by plants.

Organic matter has accumulated to some degree in all of the soils in the county. At one extreme, Carlisle soils formed in accumulations of organic material in depressions, where the rate of decomposition has been retarded by saturation. The dark color of the surface layer of mineral soils is an indication of the high content of organic matter. In most soils, the organic matter content in the surface layer is much greater than in the subsoil or substratum. One exception is soils formed in recent alluvium. Since these soils are primarily made up of eroded surface layers from higher-lying soils, they have enough organic matter throughout the soil profile to appreciably affect the soil color to a depth of 24 inches or more. Another exception is soils at higher elevations in the Green Mountains and at the highest elevations in the Taconic Mountains. In these soils, organic matter, along with iron and aluminum compounds, have been leached from the surface and subsurface layers and have been concentrated in the subsoil. In Houghtonville and Rawsonville soils, for example, the upper part of the subsoil is higher in organic matter content than the subsurface layer directly above it.

Leaching of carbonates and other nutrients has occurred, to some degree, in all of the soils. Many of the soils are moderately to strongly leached. Differences in the depth of leaching is a result of time and, more importantly on a local level, the type of parent material. For example, Stockbridge soils are leached of carbonates to a depth of greater than 40 inches, whereas Nellis soils are leached to a depth of about 23 inches. This difference is due primarily to the fact that the till from which Nellis soils are derived contains more ground-up fragments of calcareous limestone and dolomitic bedrock than that of the Stockbridge soils.

The reduction and transfer of iron, a process called gleying, is evident in somewhat poorly drained, poorly drained, and very poorly drained mineral soils. The gray color in the subsoil and substratum indicates the reduction of iron. Cabot soils are one example of soils that are gleyed in the subsoil and substratum.

As mentioned previously, in some soils, iron and aluminum compounds, called sesquioxides, have moved from the surface and subsurface horizons to the subsoil. These compounds are concentrated in the upper subsoil. When combined with organic matter, they give the soil a very dark reddish brown color. Without organic matter, they give the soil a bright red or brown color. Houghtonville and Rawsonville soils are two soils previously mentioned as having an accumulation of iron and aluminum compounds in the subsoil.

The mechanical breakdown of rock fragments has been brought about mainly by the many cycles of freezing and thawing. This is evident in soils that formed in till, which typically have more coarse fragments at greater depths in the soil, where the temperature is more constant and less freezing and thawing has taken place.

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Glossary

ABC soil. A soil having an A, a B, and a C horizon.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Aspect. The direction in which a slope faces.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Basal till. Compact glacial till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material(cn). Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer. Very channery(cnv) soil material has 35 to 60 percent of these rock fragments, and extremely channery(cnx) soil material has more than 60 percent.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is nearly flat and fan shaped; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Esker. A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glacial drift. Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.

Glacial outwash. Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter. Very gravelly soil material has 35 to 60 percent of these rock fragments, and extremely gravelly soil material has more than 60 percent.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Kame. An irregular, short ridge or hill of stratified glacial drift.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

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

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Low strength. The soil is not strong enough to support loads.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Moraine. An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Orthophotograph. Maps prepared from high-resolution aerial photographs that are corrected to eliminate the displacements of perspective, camera tilt, and terrain relief. They are scale true, meet national map accuracy standards, and permit accurate linear or area measurements.

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for a long time.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual.” In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as “permeability.” Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

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

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Relief. The elevations or inequalities of a land surface, considered collectively.

Rill. A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 3 percent
Gently sloping	3 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 35 percent
Very steep	35 percent and higher

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.” The abbreviations for soil textures are *cos-coarse sand, s-sand, fs-fine sand, vfs-very fine sand, lcos-loamy coarse sand, ls-loamy sand, lfs-loamy fine sand, lvfs-loamy very fine sand, sl-sandy loam, fsl-fine sandy loam, vfsl-very fine sandy loam, l-loam, sil-silt loam, sicl-silty clay loam, sic-silty clay,* and *clay*.

Till [glacial]. Dominantly unsorted and unstratified drift, generally unconsolidated deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are imbedded within a finer matrix that can range from clay to sandy loam.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1—Temperature and Precipitation

(Data recorded in the period 1961-1986 at Dorset, VT)

Month	Temperature						Precipitation			
	avg. daily max.	avg. daily min.	avg.	2 years in 10 will have max temp. >than	2 years in 10 will have min temp. <than	avg no. of grow'n degree days*	avg (in.)	2 yrs in 10 will have less than (in.)	2 yrs in 10 will have more than (in.)	average number of days with 0.10 inch or more
January	29.9	8.2	19.1	58	-22	4	3.10	1.66	4.36	8
February	32.1	9.3	20.7	57	-22	3	2.54	1.85	3.17	7
March	42.9	21.3	32.1	71	-8	31	3.33	1.88	4.62	8
April	55.4	30.6	43.0	81	10	145	3.77	2.87	4.62	8
May	68.1	41.3	54.7	88	25	432	4.39	2.51	6.07	9
June	75.7	49.9	62.8	91	31	617	4.63	3.14	5.99	8
July	79.9	54.0	66.9	91	37	709	4.14	2.80	5.37	8
August	77.3	52.6	65.0	90	34	714	4.59	3.31	5.78	8
September	70.1	45.8	57.9	87	25	480	4.13	2.41	5.67	8
October	59.6	36.2	47.9	79	16	246	3.80	2.40	5.38	6
November	46.2	28.7	37.5	70	8	65	3.74	2.65	5.06	8
December	33.9	15.5	24.7	61	-17	10	3.59	2.08	5.23	7
Yearly :										
Average	55.9	32.8	44.4	----	----	----	---	---	---	---
Extreme	96	-30	---	96	-28	----	---	---	---	---
Total	---	---	---	----	----	3456	45.74	21.17	55.28	93

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold : 40.0 deg. F)

Table 2.—Freeze Dates in Spring and Fall

(Data recorded in the period 1961-1986 at Dorset, VT)

Probability	Temperature		
	24°F or lower	28°F or lower	32°F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 7	May 30	June 12
2 year in 10 later than--	May 2	May 23	June 7
5 year in 10 later than--	April 25	May 11	May 28
First freezing temperature in fall:			
1 yr in 10 earlier than--	September 28	September 13	September 3
2 yr in 10 earlier than--	October 4	September 19	September 8
5 yr in 10 earlier than--	October 16	September 31	September 16

Table 3.—Growing Season

(Data recorded in the period 1961-1986 at Dorset, VT)

Probability	Daily Minimum Temperature		
	Greater than 24°F	Greater than 28°F	Greater than 32°F
	Days	Days	Days
9 years in 10	137	114	92
8 years in 10	145	122	99
5 years in 10	160	138	110
2 years in 10	175	154	122
1 year in 10	183	162	128

Table 4.—Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
3A	Copake gravelly fine sandy loam, 0 to 3 percent slopes	1,805	0.4
3B	Copake gravelly fine sandy loam, 3 to 8 percent slopes	5,060	1.2
3C	Copake gravelly fine sandy loam, 8 to 15 percent slopes	3,739	0.9
3D	Copake gravelly fine sandy loam, 15 to 25 percent slopes	1,670	0.4
3E	Copake gravelly fine sandy loam, 25 to 60 percent slopes	3,533	0.8
9	Pits-dumps complex	67	*
10D	Glebe-stratton-londonderry complex, 15 to 25 percent slopes, very rocky	867	0.2
10E	Glebe-stratton-londonderry complex, 25 to 60 percent slopes, very rocky	2,041	0.5
11F	Taconic-hubbardton-rock outcrop complex, 25 to 70 percent slopes, very stony	855	0.2
18B	Windsor loamy fine sand, 0 to 8 percent slopes	314	*
18C	Windsor loamy fine sand, 8 to 15 percent slopes	661	0.2
18E	Windsor loamy fine sand, 15 to 60 percent slopes	572	0.1
21A	Limerick silt loam, 0 to 3 percent slopes	1,020	0.2
23A	Adrian and saco soils, 0 to 2 percent slopes	3,270	0.8
24A	Carlisle mucky peat, 0 to 2 percent slopes	1,649	0.4
25B	Belgrade silt loam, 0 to 8 percent slopes	403	*
26A	Raynham silt loam, 0 to 3 percent slopes	527	0.1
27B	Udipsamments and udorthents, gently sloping	1,213	0.3
28A	Udifluvents, loamy-skeletal	945	0.2
29A	Occum fine sandy loam, 0 to 3 percent slopes	1,401	0.3
34A	Pootatuck fine sandy loam, 0 to 3 percent slopes	1,295	0.3
35B	Hartland silt loam, 0 to 5 percent slopes	456	0.1
40B	Galway-nellis-farmington complex, 3 to 8 percent slopes, rocky	309	*
40C	Galway-nellis-farmington complex, 8 to 15 percent slopes, rocky	1,870	0.4
40D	Galway-nellis-farmington complex, 15 to 25 percent slopes, rocky	3,485	0.8
41C	Galway-farmington complex, 8 to 15 percent slopes, very rocky	706	0.2
41D	Galway-farmington complex, 15 to 25 percent slopes, very rocky	3,094	0.7
41E	Galway-farmington complex, 25 to 50 percent slopes, very rocky	5,758	1.3
42C	Macomber-taconic complex, 8 to 15 percent slopes, rocky	3,272	0.8
42D	Macomber-taconic complex, 15 to 25 percent slopes, rocky	6,212	1.4
42E	Macomber-taconic complex, 25 to 60 percent slopes, rocky	16,161	3.7
43C	Taconic-macomber complex, 8 to 15 percent slopes, very rocky	865	0.2
43D	Taconic-macomber complex, 15 to 25 percent slopes, very rocky	4,288	1.0
43E	Taconic-macomber complex, 25 to 60 percent slopes, very rocky	6,662	1.5
44B	Dutchess channery loam, 3 to 8 percent slopes	402	*
44C	Dutchess channery loam, 8 to 15 percent slopes	1,906	0.4
44D	Dutchess channery loam, 15 to 25 percent slopes	1,997	0.5
47C	Dutchess channery loam, 8 to 15 percent slopes, very stony	2,640	0.6
47D	Dutchess channery loam, 15 to 25 percent slopes, very stony	6,933	1.6
47E	Dutchess channery loam, 25 to 60 percent slopes, very stony	22,854	5.3
48B	Pittstown loam, 3 to 8 percent slopes	559	0.1
48C	Pittstown loam, 8 to 15 percent slopes	3,666	0.8
48D	Pittstown loam, 15 to 25 percent slopes	814	0.2
49C	Pittstown loam, 8 to 15 percent slopes, very stony	2,711	0.6
49D	Pittstown loam, 15 to 25 percent slopes, very stony	2,599	0.6
50B	Brayton loam, 0 to 5 percent slopes	321	*
51B	Brayton loam, 0 to 5 percent slopes, very stony	261	*
52A	Mansfield mucky silt loam, 0 to 3 percent slopes, very stony	479	0.1
64B	Stockbridge loam, 2 to 8 percent slopes	3,104	0.7
64C	Stockbridge loam, 8 to 15 percent slopes	4,290	1.0
64D	Stockbridge loam, 15 to 25 percent slopes	1,631	0.4
65C	Stockbridge loam, 8 to 15 percent slopes, very stony	510	0.1
65D	Stockbridge loam, 15 to 25 percent slopes, very stony	1,030	0.2
66A	Georgia loam, 0 to 3 percent slopes	299	*
66B	Georgia loam, 3 to 8 percent slopes	3,615	0.8
66C	Georgia loam, 8 to 15 percent slopes	1,617	0.4
66D	Georgia loam, 15 to 25 percent slopes	389	*
67B	Georgia loam, 3 to 8 percent slopes, very stony	2,159	0.5
67C	Georgia loam, 8 to 15 percent slopes, very stony	2,245	0.5
68A	Massena silt loam, 0 to 3 percent slopes	822	0.2
68B	Massena silt loam, 3 to 8 percent slopes	773	0.2

See footnote at end of table.

Table 4.—Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Soil name	Acres	Percent
69A	Massena silt loam, 0 to 3 percent slopes, very stony	1,548	0.4
69B	Massena silt loam, 3 to 8 percent slopes, very stony	1,318	0.3
70A	Groton gravelly fine sandy loam, 0 to 3 percent slopes	962	0.2
70B	Groton gravelly fine sandy loam, 3 to 8 percent slopes	868	0.2
70C	Groton gravelly fine sandy loam, 8 to 15 percent slopes	345	*
70D	Groton gravelly fine sandy loam, 15 to 25 percent slopes	782	0.2
70E	Groton gravelly fine sandy loam, 25 to 60 percent slopes	441	0.1
71A	Hero gravelly fine sandy loam, 0 to 3 percent slopes	1,200	0.3
71B	Hero gravelly fine sandy loam, 3 to 8 percent slopes	729	0.2
72A	Fredon fine sandy loam, 0 to 3 percent slopes	1,054	0.2
84B	Nellis silt loam, 3 to 8 percent slopes	1,503	0.3
84C	Nellis silt loam, 8 to 15 percent slopes	1,906	0.4
84D	Nellis silt loam, 15 to 25 percent slopes	877	0.2
85B	Nellis silt loam, 3 to 8 percent slopes, very stony	440	0.1
85C	Nellis silt loam, 8 to 15 percent slopes, very stony	924	0.2
85D	Nellis silt loam, 15 to 25 percent slopes, very stony	2,355	0.5
85E	Nellis silt loam, 25 to 50 percent slopes, very stony	1,461	0.3
86A	Amenia silt loam, 0 to 3 percent slopes	219	*
86B	Amenia silt loam, 3 to 8 percent slopes	1,047	0.2
86C	Amenia silt loam, 8 to 15 percent slopes	478	0.1
87B	Amenia silt loam, 3 to 8 percent slopes, very stony	738	0.2
87C	Amenia silt loam, 8 to 15 percent slopes, very stony	443	0.1
90C	Berkshire fine sandy loam, 3 to 15 percent slopes, extremely stony	138	*
90E	Berkshire fine sandy loam, 15 to 50 percent slopes, extremely stony	1,218	0.3
93B	Pittsfield fine sandy loam, 3 to 8 percent slopes	1,676	0.4
93C	Pittsfield fine sandy loam, 8 to 15 percent slopes	2,198	0.5
93D	Pittsfield fine sandy loam, 15 to 25 percent slopes	643	0.1
94B	Pittsfield fine sandy loam, 3 to 8 percent slopes, very stony	377	*
94C	Pittsfield fine sandy loam, 8 to 15 percent slopes, very stony	2,266	0.5
94D	Pittsfield fine sandy loam, 15 to 25 percent slopes, very stony	1,652	0.4
94E	Pittsfield fine sandy loam, 25 to 50 percent slopes, very stony	1,201	0.3
95C	Houghtonville fine sandy loam, 8 to 15 percent slopes, very stony	1,179	0.3
95D	Houghtonville fine sandy loam, 15 to 25 percent slopes, very stony	3,701	0.9
95E	Houghtonville fine sandy loam, 25 to 60 percent slopes, very stony	5,943	1.4
96D	Hogback-rawsonville-rock outcrop complex, 15 to 25 percent slopes, very stony	5,843	1.3
96F	Hogback-rawsonville-rock outcrop complex, 25 to 70 percent slopes, very stony	2,520	0.6
100B	Wilmington fine sandy loam, 0 to 8 percent slopes, very stony	2,750	0.6
102B	Mundal fine sandy loam, 3 to 8 percent slopes	397	*
102C	Mundal fine sandy loam, 8 to 15 percent slopes	1,802	0.4
104B	Colton gravelly loamy sand, 3 to 8 percent slopes, extremely stony	472	0.1
104C	Colton gravelly loamy sand, 8 to 15 percent slopes, extremely stony	740	0.2
104E	Colton gravelly loamy sand, 15 to 50 percent slopes, extremely stony	290	*
105B	Monadnock fine sandy loam, 3 to 8 percent slopes, very stony	225	*
105C	Monadnock fine sandy loam, 8 to 15 percent slopes, very stony	1,275	0.3
105D	Monadnock fine sandy loam, 15 to 25 percent slopes, very stony	571	0.1
105E	Monadnock fine sandy loam, 25 to 50 percent slopes, very stony	545	0.1
106B	Berkshire fine sandy loam, 3 to 8 percent slopes, very stony	989	0.2
106C	Berkshire fine sandy loam, 8 to 15 percent slopes, very stony	5,173	1.2
106D	Berkshire fine sandy loam, 15 to 25 percent slopes, very stony	7,259	1.7
106E	Berkshire fine sandy loam, 25 to 50 percent slopes, very stony	11,781	2.7
108B	Peru fine sandy loam, 3 to 8 percent slopes, very stony	1,765	0.4
108C	Peru fine sandy loam, 8 to 15 percent slopes, very stony	7,491	1.7
108D	Peru fine sandy loam, 15 to 25 percent slopes, very stony	1,603	0.4
109C	Tunbridge-berkshire complex, 8 to 15 percent slopes, rocky	1,557	0.4
109D	Tunbridge-berkshire complex, 15 to 25 percent slopes, rocky	3,017	0.7
109E	Tunbridge-berkshire complex, 25 to 50 percent slopes, rocky	7,298	1.7
111C	Rawsonville-houghtonville complex, 8 to 15 percent slopes, rocky	2,854	0.7
111D	Rawsonville-houghtonville complex, 15 to 25 percent slopes, rocky	4,101	0.9
111E	Rawsonville-houghtonville complex, 25 to 60 percent slopes, rocky	6,157	1.4
112C	Rawsonville-hogback complex, 8 to 15 percent slopes, very rocky	980	0.2
112D	Rawsonville-hogback complex, 15 to 25 percent slopes, very rocky	2,685	0.6

See footnote at end of table.

Table 4.—Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Soil name	Acres	Percent
112E	Rawsonville-hogback complex, 25 to 60 percent slopes, very rocky---------	8,291	1.9
113B	Cabot silt loam, 3 to 8 percent slopes, very stony----------------------	3,120	0.7
114B	Mundal fine sandy loam, 3 to 8 percent slopes, very stony---------------	1,111	0.3
114C	Mundal fine sandy loam, 8 to 15 percent slopes, very stony--------------	10,309	2.4
114D	Mundal fine sandy loam, 15 to 25 percent slopes, very stony-------------	2,201	0.5
115B	Peru fine sandy loam, 3 to 8 percent slopes-----------------------------	813	0.2
115C	Peru fine sandy loam, 8 to 15 percent slopes----------------------------	1,993	0.5
115D	Peru fine sandy loam, 15 to 25 percent slopes---------------------------	251	*
116D	Lyman-tunbridge-rock outcrop complex, 15 to 25 percent slopes, very stony	215	*
116F	Lyman-tunbridge-rock outcrop complex, 25 to 70 percent slopes, very stony	1,710	0.4
117B	Berkshire fine sandy loam, 3 to 8 percent slopes------------------------	247	*
117C	Berkshire fine sandy loam, 8 to 15 percent slopes-----------------------	933	0.2
117D	Berkshire fine sandy loam, 15 to 25 percent slopes----------------------	711	0.2
118C	Tunbridge-lyman complex, 8 to 15 percent slopes, very rocky-------------	280	*
118D	Tunbridge-lyman complex, 15 to 25 percent slopes, very rocky------------	1,224	0.3
118E	Tunbridge-lyman complex, 25 to 60 percent slopes, very rocky------------	3,430	0.8
221F	Tunbridge-berkshire association, very steep, rocky----------------------	2,752	0.6
403B	Cabot-carlisle association, undulating, very stony----------------------	694	0.2
405D	Berkshire-tunbridge association, hilly, very stony----------------------	3,155	0.7
413D	Peru-berkshire-cabot association, hilly, very stony---------------------	2,308	0.5
702E	Rawsonville-hogback association, very hilly, very rocky-----------------	10,413	2.4
703C	Mundal-houghtonville association, rolling, very stony-------------------	3,343	0.8
705D	Rawsonville-houghtonville-mundal association, hilly, rocky--------------	7,297	1.7
715D	Houghtonville-rawsonville association, hilly, rocky---------------------	36,932	8.5
902F	Hogback-rawsonville-rock outcrop association, very steep, very stony-----	3,878	0.9
903C	Mundal-wilmington association, rolling, very stony----------------------	20,542	4.7
905D	Houghtonville-monadnock association, hilly, very stony------------------	7,300	1.7
913E	Glebe-stratton association, very hilly, very rocky----------------------	6,632	1.5
923B	Wilmington-mundal association, undulating, very stony-------------------	7,892	1.8
W	Water---	882	0.2
	Total---	433,500	100.0

* Less than 0.1 percent.

Table 5.—Important Farmland

Map Unit Symbol	Map Unit Name	Important Farmland Rating
3A	Copake gravelly fine sandy loam, 0 to 3 percent slopes	Prime
3B	Copake gravelly fine sandy loam, 3 to 8 percent slopes	Prime
3C	Copake gravelly fine sandy loam, 8 to 15 percent slopes	Statewide
18B	Windsor loamy fine sand, 0 to 8 percent slopes	Statewide
21A	Limerick silt loam, 0 to 3 percent slopes	Statewide (b)
25B	Belgrade silt loam, 0 to 8 percent slopes	Statewide
26A	Raynham silt loam, 0 to 3 percent slopes	Prime (b)
29A	Occum fine sandy loam, 0 to 3 percent slopes	Prime (f)
34A	Pootatuck fine sandy loam, 0 to 3 percent slopes	Prime (f)
35B	Hartland silt loam, 0 to 5 percent slopes	Prime
40B	Galway-Nellis-Farmington complex, 3 to 8 percent slopes, rocky	Prime
40C	Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky	Statewide
42C	Macomber-Taconic complex, 8 to 15 percent slopes, rocky	Statewide
44B	Dutchess channery loam, 3 to 8 percent slopes	Prime
44C	Dutchess channery loam, 8 to 15 percent slopes	Statewide
48B	Pittstown loam, 3 to 8 percent slopes	Prime
48C	Pittstown loam, 8 to 15 percent slopes	Statewide
50B	Brayton loam, 0 to 5 percent slopes	Statewide (b)
64B	Stockbridge loam, 2 to 8 percent slopes	Prime
64C	Stockbridge loam, 8 to 15 percent slopes	Statewide
66A	Georgia loam, 0 to 3 percent slopes	Prime
66B	Georgia loam, 3 to 8 percent slopes	Prime
66C	Georgia loam, 8 to 15 percent slopes	Statewide
68A	Massena silt loam, 0 to 3 percent slopes	Prime (b)
68B	Massena silt loam, 3 to 8 percent slopes	Prime (b)
70A	Groton gravelly fine sandy loam, 0 to 3 percent slopes	Statewide
70B	Groton gravelly fine sandy loam, 3 to 8 percent slopes	Statewide
71A	Hero gravelly fine sandy loam, 0 to 3 percent slopes	Prime
71B	Hero gravelly fine sandy loam, 3 to 8 percent slopes	Prime
72A	Fredon fine sandy loam, 0 to 3 percent slopes	Prime (b)
84B	Nellis silt loam, 3 to 8 percent slopes	Prime
84C	Nellis silt loam, 8 to 15 percent slopes	Statewide
86A	Amenia silt loam, 0 to 3 percent slopes	Prime
86B	Amenia silt loam, 3 to 8 percent slopes	Prime
86C	Amenia silt loam, 8 to 15 percent slopes	Statewide
93B	Pittsfield fine sandy loam, 3 to 8 percent slopes	Prime
93C	Pittsfield fine sandy loam, 8 to 15 percent slopes	Statewide
102B	Mundal fine sandy loam, 3 to 8 percent slopes	Statewide
102C	Mundal fine sandy loam, 8 to 15 percent slopes	Statewide
115B	Peru fine sandy loam, 3 to 8 percent slopes	Prime
115C	Peru fine sandy loam, 8 to 15 percent slopes	Statewide
117B	Berkshire fine sandy loam, 3 to 8 percent slopes	Prime
117C	Berkshire fine sandy loam, 8 to 15 percent slopes	Statewide

(b) - The soils in this soil map unit have a wetness limitation that may be difficult and/or unfeasible to overcome. Areas of this soil map unit do not qualify as Prime, Statewide, or Local, if artificial drainage is not feasible. Feasible means it is possible to install artificial drainage. No consideration is given to the cost of overcoming the drainage limitation or any law governing the installation of artificial drainage when making an Important Farmland determination.

(f) - The soils in this soil map unit are frequently flooded. Flooding is likely to occur often under usual weather conditions, and there is more than a 50 percent chance of flooding in any year. Typically, however, flooding occurs outside of the growing season. During the growing season, flooding is expected infrequently under usual weather conditions, with a 5 to 50 percent chance of flooding in any year.

Table 6.—Land Capability and Yields per Acre of Crops and Pasture

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

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
3A:		24.00	---	---	4.50	8.50
Copake	1					
3B:		24.00	---	---	4.50	8.50
Copake	2e					
3C:		22.00	---	---	4.00	7.50
Copake	3e					
3D:		19.00	---	---	3.50	6.50
Copake	4e					
3E:		---	---	---	---	---
Copake	7e					
9:		---	---	---	---	---
Pits	8s					
Dumps						
10D:		---	---	---	---	---
Glebe	7s					
Stratton						
Londonderry						
10E:		---	---	---	---	---
Glebe	7s					
Stratton						
Londonderry						
11F:		---	---	---	---	---
Taconic	7s					
Hubbardton						
Rock outcrop						
18B:		14.00	2.00	5.50	2.50	---
Windsor	3s					
18C:		12.00	2.00	5.00	2.50	---
Windsor	4s					
18E:		---	---	---	---	---
Windsor	7s					
21A:		---	---	---	---	4.00
Limerick	4w					
23A:		---	---	---	---	---
Adrian	5w					
Saco						
24A:		---	---	---	---	---
Carlisle	5w					
25B:		22.00	---	7.50	3.50	---
Belgrade	2e					
26A:		---	---	---	---	6.00
Raynham	4w					

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
27B:		---	---	---	---	---
Udipsamments	8s					
Udorthents						
28A:		---	---	---	---	---
Udifluvents	8s					
29A:		24.00	4.00	7.00	4.00	---
Occum	1					
34A:		24.00	4.50	7.50	4.50	---
Pootatuck	2w					
35B:		28.00	4.50	7.20	4.50	---
Hartland	1					
40B:		19.00	---	---	4.50	8.50
Galway	2e					
Nellis						
Farmington						
40C:		17.00	---	---	4.00	7.50
Galway	3e					
Nellis						
Farmington						
40D:		15.00	---	---	4.00	7.50
Galway	4e					
Nellis						
Farmington						
41C:		---	---	---	---	3.00
Galway	6s					
Farmington						
41D:		---	---	---	---	3.00
Galway	6s					
Farmington						
41E:		---	---	---	---	---
Galway	7s					
Farmington						
42C:		15.00	---	---	---	6.00
Macomber	3e					
Taconic						
42D:		---	---	---	---	2.70
Macomber	6s					
Taconic						
42E:		---	---	---	---	---
Macomber	7s					
Taconic						
43C:		---	---	---	---	2.40
Taconic	6s					
Macomber						
43D:		---	---	---	---	1.70
Taconic	6s					
Macomber						

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
43E:		---	---	---	---	---
Taconic	7s					
Macomber						
44B:		22.00	4.00	6.40	4.00	---
Dutchess	2e					
44C:		20.00	4.00	6.40	4.00	---
Dutchess	3e					
44D:		17.00	3.50	5.60	3.50	---
Dutchess	4e					
47C:		---	---	---	---	3.50
Dutchess	6s					
47D:		---	---	---	---	3.50
Dutchess	6s					
47E:		---	---	---	---	---
Dutchess	7s					
48B:		20.00	---	6.50	3.50	---
Pittstown	2e					
48C:		18.00	---	6.50	3.50	---
Pittstown	3e					
48D:		16.00	---	5.50	3.00	---
Pittstown	4e					
49C:		---	---	---	---	3.00
Pittstown	6s					
49D:		---	---	---	---	3.00
Pittstown	6s					
50B:		15.00	3.00	---	3.00	5.50
Brayton	3w					
51B:		---	---	---	---	2.70
Brayton	7s					
52A:		---	---	---	---	---
Mansfield	7s					
64B:		24.00	4.50	8.50	4.50	---
Stockbridge	2e					
64C:		22.00	4.50	8.50	4.50	---
Stockbridge	3e					
64D:		20.00	4.00	7.50	4.00	---
Stockbridge	4e					
65C:		---	---	---	---	3.00
Stockbridge	6s					
65D:		---	---	---	---	3.00
Stockbridge	6s					
66A:		23.00	4.00	6.40	4.00	---
Georgia	2w					

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
66B:		23.00	4.00	6.40	4.00	---
Georgia-----------------	2e					
66C:		21.00	4.00	6.40	4.00	---
Georgia-----------------	3e					
66D:		18.00	3.50	5.60	3.50	---
Georgia-----------------	4e					
67B:		---	---	---	---	3.80
Georgia-----------------	6s					
67C:		---	---	---	---	3.80
Georgia-----------------	6s					
68A:		18.00	4.00	---	4.00	6.50
Massena-----------------	3w					
68B:		18.00	4.00	---	4.00	6.50
Massena-----------------	3w					
69A:		---	---	---	---	---
Massena-----------------	5s					
69B:		---	---	---	---	3.00
Massena-----------------	6s					
70A:		16.00	3.50	5.50	3.00	---
Groton------------------	3s					
70B:		16.00	3.50	5.50	3.00	---
Groton------------------	3s					
70C:		14.00	3.50	5.50	3.00	---
Groton------------------	4s					
70D:		---	---	---	---	3.00
Groton------------------	6s					
70E:		---	---	---	---	---
Groton------------------	7s					
71A:		22.00	4.00	---	4.00	7.50
Hero--------------------	2w					
71B:		22.00	4.00	---	4.00	7.50
Hero--------------------	2e					
72A:		15.00	---	---	3.00	5.70
Fredon------------------	3w					
84B:		25.00	---	---	4.50	8.50
Nellis------------------	2e					
84C:		23.00	---	---	4.50	8.50
Nellis------------------	3e					
84D:		20.00	---	---	4.00	7.50
Nellis------------------	4e					
85B:		---	---	---	---	3.00
Nellis------------------	6s					

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
85C:		---	---	---	---	3.00
Nellis------------------	6s					
85D:		---	---	---	---	3.00
Nellis------------------	6s					
85E:		---	---	---	---	---
Nellis------------------	7s					
86A:		24.00	---	---	4.50	8.50
Amenia------------------	2w					
86B:		24.00	---	---	4.50	8.50
Amenia------------------	2e					
86C:		22.00	---	---	4.50	8.50
Amenia------------------	3e					
87B:		---	---	---	---	3.00
Amenia------------------	6s					
87C:		---	---	---	---	3.00
Amenia------------------	6s					
90C:		---	---	---	---	---
Berkshire---------------	7s					
90E:		---	---	---	---	---
Berkshire---------------	7s					
93B:		24.00	4.00	7.60	4.00	---
Pittsfield--------------	2e					
93C:		22.00	4.00	7.60	4.00	---
Pittsfield--------------	3e					
93D:		18.00	3.50	6.60	3.50	---
Pittsfield--------------	4e					
94B:		---	---	---	---	3.00
Pittsfield--------------	6s					
94C:		---	---	---	---	3.00
Pittsfield--------------	6s					
94D:		---	---	---	---	3.00
Pittsfield--------------	6s					
94E:		---	---	---	---	---
Pittsfield--------------	7s					
95C:		---	---	---	---	3.60
Houghtonville-----------	6s					
95D:		---	---	---	---	3.60
Houghtonville-----------	6s					
95E:		---	---	---	---	---
Houghtonville-----------	7s					

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
96D:		---	---	---	---	2.40
Hogback	6s					
Rawsonville						
Rock outcrop						
96F:		---	---	---	---	---
Hogback	7s					
Rawsonville						
Rock outcrop						
100B:		---	---	---	---	3.00
Wilmington	6s					
102B:		---	---	5.60	3.50	---
Mundal	2e					
102C:		---	---	5.60	3.50	---
Mundal	3e					
104B:		---	---	---	---	---
Colton	7s					
104C:		---	---	---	---	---
Colton	7s					
104E:		---	---	---	---	---
Colton	7s					
105B:		---	---	---	---	3.00
Monadnock	6s					
105C:		---	---	---	---	3.00
Monadnock	6s					
105D:		---	---	---	---	3.00
Monadnock	6s					
105E:		---	---	---	---	---
Monadnock	7s					
106B:		---	---	---	---	3.00
Berkshire	6s					
106C:		---	---	---	---	3.00
Berkshire	6s					
106D:		---	---	---	---	3.00
Berkshire	6s					
106E:		---	---	---	---	---
Berkshire	7s					
108B:		---	---	---	---	3.00
Peru	6s					
108C:		---	---	---	---	3.00
Peru	6s					
108D:		---	---	---	---	3.00
Peru	6s					

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
109C:		---	---	---	---	3.10
Tunbridge	6s					
Berkshire						
109D:		---	---	---	---	3.10
Tunbridge	6s					
Berkshire						
109E:		---	---	---	---	---
Tunbridge	7s					
Berkshire						
111C:		---	---	---	---	2.70
Rawsonville	6s					
Houghtonville						
111D:		---	---	---	---	2.70
Rawsonville	6s					
Houghtonville						
111E:		---	---	---	---	---
Rawsonville	7s					
Houghtonville						
112C:		---	---	---	---	2.70
Rawsonville	6s					
Hogback						
112D:		---	---	---	---	2.70
Rawsonville	6s					
Hogback						
112E:		---	---	---	---	---
Rawsonville	7s					
Hogback						
113B:		---	---	---	---	2.70
Cabot	6s					
114B:		---	---	---	---	3.10
Mundal	6s					
114C:		---	---	---	---	3.10
Mundal	6s					
114D:		---	---	---	---	3.10
Mundal	6s					
115B:		20.00	4.00	---	4.00	8.00
Peru	2e					
115C:		18.00	4.00	---	4.00	8.00
Peru	3e					
115D:		16.00	3.50	---	3.50	7.00
Peru	4e					
116D:		---	---	---	---	---
Lyman	7s					
Tunbridge						
Rock outcrop						

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
116F:		---	---	---	---	---
Lyman-------------------	7s					
Tunbridge---------------						
Rock outcrop------------						
117B:		22.00	---	6.50	4.00	---
Berkshire---------------	2e					
117C:		20.00	---	6.00	3.50	---
Berkshire---------------	3e					
117D:		15.00	---	5.00	3.00	---
Berkshire---------------	4e					
118C:		---	---	---	---	3.10
Tunbridge---------------	6s					
Lyman-------------------						
118D:		---	---	---	---	3.10
Tunbridge---------------	6s					
Lyman-------------------						
118E:		---	---	---	---	---
Tunbridge---------------	7s					
Lyman-------------------						
221F:		---	---	---	---	---
Tunbridge---------------	7s					
Berkshire---------------						
403B:		---	---	---	---	2.70
Cabot-------------------	6s					
Carlisle----------------						
405D:		---	---	---	---	3.00
Berkshire---------------	6s					
Tunbridge---------------						
413D:		---	---	---	---	3.00
Peru--------------------	6s					
Berkshire---------------						
Cabot-------------------						
702E:		---	---	---	---	---
Rawsonville-------------	7s					
Hogback-----------------						
703C:		---	---	---	---	3.10
Mundal------------------	6s					
Houghtonville-----------						
705D:		---	---	---	---	2.70
Rawsonville-------------	6s					
Houghtonville-----------						
Mundal------------------						
715D:		---	---	---	---	3.60
Houghtonville-----------	6s					
Rawsonville-------------						

Table 6.—Land Capability and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Corn silage	Grass hay	Grass-clover	Grass-legume hay	Pasture
		Tons	Tons	AUM	Tons	AUM
902F:		---	---	---	---	---
Hogback	7s					
Rawsonville						
Rock outcrop						
903C:		---	---	---	---	3.10
Mundal	6s					
Wilmington						
905D:		---	---	---	---	3.60
Houghtonville	6s					
Monadnock						
913E:		---	---	---	---	---
Glebe	7s					
Stratton						
923B:		---	---	---	---	3.00
Wilmington	6s					
Mundal						

Table 7.—Woodland Management and Productivity

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
3A:	1								
Copake------------------		Slight	Slight	Slight	Slight	eastern white pine--	65	114.00	Austrian pine,
						northern red oak----	60	43.00	European larch,
						sugar maple---------	55	29.00	Norway spruce,
									eastern white pine
3B:	1								
Copake------------------		Slight	Slight	Slight	Slight	eastern white pine--	65	114.00	Austrian pine,
						northern red oak----	60	43.00	European larch,
						sugar maple---------	55	29.00	Norway spruce,
									eastern white pine
3C:	1								
Copake------------------		Slight	Slight	Slight	Slight	eastern white pine--	65	114.00	Austrian pine,
						northern red oak----	60	43.00	European larch,
						sugar maple---------	55	29.00	Norway spruce,
									eastern white pine
3D:	2								
Copake------------------		Moderate	Moderate	Slight	Slight	eastern white pine--	65	114.00	Austrian pine,
						northern red oak----	60	43.00	European larch,
						sugar maple---------	55	29.00	Norway spruce,
									eastern white pine
3E:	3								
Copake------------------		Severe	Severe	Slight	Slight	eastern white pine--	65	114.00	Austrian pine,
						northern red oak----	60	43.00	European larch,
						sugar maple---------	55	29.00	Norway spruce,
									eastern white pine
9:	7								
Pits--------------------		---	---	---	---	---	---	---	---
Dumps-------------------		---	---	---	---	---	---	---	---

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
10D:	7								
Glebe-------------------		Severe	Moderate	Slight	Moderate	balsam fir----------	---	---	balsam fir, white spruce
						eastern hemlock-----	---	---	
						mountain maple------	---	---	
						paper birch---------	---	---	
						red maple-----------	---	---	
						sugar maple---------	---	---	
						red spruce----------	50	114.00	
						yellow birch--------	---	---	
						American beech------	---	---	
Stratton----------------		Severe	Moderate	Moderate	Severe	American beech------	---	---	balsam fir, white spruce
						balsam fir----------	---	---	
						eastern hemlock-----	---	---	
						mountain maple------	---	---	
						paper birch---------	---	---	
						red maple-----------	---	---	
						sugar maple---------	---	---	
						yellow birch--------	---	---	
						red spruce----------	35	72.00	
Londonderry-------------		Severe	Moderate	Severe	Severe	balsam fir----------	---	---	---
						white spruce--------	---	---	
						red spruce----------	30	57.00	
10E:	7								
Glebe-------------------		Severe	Severe	Slight	Moderate	balsam fir----------	---	---	balsam fir, white spruce
						eastern hemlock-----	---	---	
						mountain maple------	---	---	
						paper birch---------	---	---	
						red maple-----------	---	---	
						sugar maple---------	---	---	
						red spruce----------	50	114.00	
						yellow birch--------	---	---	
						American beech------	---	---	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
10E:	7								
Stratton		Severe	Severe	Moderate	Severe	American beech	---	---	balsam fir, white spruce
						balsam fir	---	---	
						eastern hemlock	---	---	
						mountain maple	---	---	
						paper birch	---	---	
						red maple	---	---	
						sugar maple	---	---	
						yellow birch	---	---	
						red spruce	35	72.00	
Londonderry		Severe	Severe	Severe	Severe	balsam fir	---	---	---
						white spruce	---	---	
						red spruce	30	57.00	
11F:	6								
Taconic		Severe	Severe	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						northern red oak	50	29.00	
						red spruce	40	86.00	
						white oak	50	29.00	
						white spruce	50	114.00	
						paper birch	53	57.00	
						balsam fir	50	100.00	
						sugar maple	50	29.00	
Hubbardton		Severe	Severe	Severe	Severe	American hornbeam	---	---	---
						black oak	---	---	
						eastern hemlock	---	---	
						hickory	---	---	
						red maple	---	---	
						red spruce	35	72.00	
						white oak	---	---	
						sugar maple	50	29.00	
						eastern white pine	50	86.00	
						northern red oak	50	29.00	
Rock Outcrop		---	---	---	---	---	---	---	---
18B:	2								
Windsor		Slight	Slight	Severe	Slight	northern red oak	52	29.00	Norway spruce, eastern white pine, red pine
						red pine	61	100.00	
						eastern white pine	57	100.00	
						sugar maple	55	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
18C:	2								
Windsor		Slight	Slight	Severe	Slight	northern red oak	52	29.00	Norway spruce, eastern white pine, red pine
						red pine	61	100.00	
						eastern white pine	57	100.00	
						sugar maple	55	29.00	
18E:	3								
Windsor		Severe	Severe	Severe	Slight	northern red oak	52	29.00	Norway spruce, eastern white pine, red pine
						red pine	61	100.00	
						eastern white pine	57	100.00	
						sugar maple	55	29.00	
21A:	6								
Limerick		Slight	Severe	Severe	Severe	eastern white pine	65	114.00	eastern arborvitae, eastern white pine, white spruce
						red maple	40	29.00	
23A:	7								
Adrian		Slight	Severe	Severe	Severe	quaking aspen	60	57.00	---
						red maple	53	29.00	
						tamarack	45	29.00	
						silver maple	78	29.00	
						white ash	69	57.00	
						green ash	69	57.00	
Saco		Slight	Severe	Severe	Severe	red maple	50	29.00	---
						eastern white pine	50	86.00	
						eastern arborvitae	45	72.00	
24A:	7								
Carlisle		Slight	Severe	Severe	Severe	green ash	---	---	---
						quaking aspen	---	---	
						swamp white oak	---	---	
						silver maple	82	29.00	
						red maple	56	29.00	
						white ash	---	---	
25B:	3								
Belgrade		Slight	Slight	Slight	Slight	eastern white pine	75	143.00	European larch, eastern white pine, white spruce
						white spruce	65	143.00	
						northern red oak	62	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
26A:	6								
Raynham		Slight	Severe	Moderate	Severe	balsam fir	---	---	eastern white pine, white spruce
						eastern hemlock	---	---	
						elm	---	---	
						gray birch	---	---	
						red spruce	45	100.00	
						sugar maple	---	---	
						tamarack	---	---	
						red maple	65	43.00	
						eastern white pine	65	114.00	
						white spruce	55	129.00	
27B:	7								
Udipsamments		---	---	---	---	---	---	---	---
Udorthents		---	---	---	---	---	---	---	---
28A:	7								
Udifluvents		---	---	---	---	---	---	---	---
29A:	2								
Occum		Slight	Slight	Slight	Slight	eastern white pine	70	129.00	eastern white pine, red pine, white spruce
						northern red oak	65	43.00	
						sugar maple	60	43.00	
34A:	2								
Pootatuck		Slight	Slight	Slight	Slight	yellow birch	60	43.00	eastern white pine, white spruce
						red pine	75	143.00	
						eastern white pine	75	143.00	
						red maple	60	43.00	
35B:	1								
Hartland		Slight	Slight	Slight	Slight	black oak	---	---	eastern white pine, larch, red pine, white spruce
						gray birch	---	---	
						hickory	---	---	
						paper birch	---	---	
						white ash	---	---	
						white oak	---	---	
						yellow birch	---	---	
						eastern white pine	70	129.00	
						northern red oak	65	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
40B:	3								
Galway		Slight	Slight	Slight	Moderate	white ash	75	43.00	European larch, Norway spruce, eastern white pine, red pine
						northern red oak	70	57.00	
						sugar maple	65	43.00	
Nellis		Slight	Slight	Slight	Slight	American basswood	80	57.00	Austrian pine, Douglas fir, European larch, Norway spruce, black walnut, eastern white pine
						sugar maple	70	43.00	
						white ash	85	57.00	
						eastern white pine	85	143.00	
						northern red oak	80	57.00	
Farmington		Slight	Slight	Severe	Moderate	eastern hemlock	50	---	European larch, eastern white pine, red pine
						northern red oak	50	29.00	
						sugar maple	50	29.00	
						white ash	55	29.00	
						eastern white pine	55	86.00	
						American basswood	55	29.00	
40C:	3								
Galway		Slight	Slight	Slight	Moderate	white ash	75	43.00	European larch, Norway spruce, eastern white pine, red pine
						northern red oak	70	57.00	
						sugar maple	65	43.00	
Nellis		Slight	Slight	Slight	Slight	American basswood	80	57.00	Austrian pine, Douglas fir, European larch, Norway spruce, black walnut, eastern white pine
						sugar maple	70	43.00	
						white ash	85	57.00	
						eastern white pine	85	143.00	
						northern red oak	80	57.00	
Farmington		Slight	Slight	Severe	Moderate	eastern hemlock	50	---	European larch, eastern white pine, red pine
						northern red oak	50	29.00	
						sugar maple	50	29.00	
						white ash	55	29.00	
						eastern white pine	55	86.00	
						American basswood	55	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
40D:	3								
Galway------------------		Moderate	Moderate	Slight	Moderate	white ash-----------	75	43.00	European larch,
						northern red oak----	70	57.00	Norway spruce,
						sugar maple---------	65	43.00	eastern white
									pine, red pine
Nellis------------------		Moderate	Moderate	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
Farmington--------------		Moderate	Moderate	Severe	Moderate	eastern hemlock-----	50	---	European larch,
						northern red oak----	50	29.00	eastern white
						sugar maple---------	50	29.00	pine, red pine
						white ash-----------	55	29.00	
						eastern white pine--	55	86.00	
						American basswood---	55	29.00	
41C:	4								
Galway------------------		Slight	Slight	Slight	Moderate	white ash-----------	75	43.00	European larch,
						northern red oak----	70	57.00	Norway spruce,
						sugar maple---------	65	43.00	eastern white
									pine, red pine
Farmington--------------		Slight	Slight	Severe	Moderate	eastern hemlock-----	50	---	European larch,
						northern red oak----	50	29.00	eastern white
						sugar maple---------	50	29.00	pine, red pine
						white ash-----------	55	29.00	
						eastern white pine--	55	86.00	
						American basswood---	55	29.00	
41D:	5								
Galway------------------		Moderate	Moderate	Slight	Moderate	white ash-----------	75	43.00	European larch,
						northern red oak----	70	57.00	Norway spruce,
						sugar maple---------	65	43.00	eastern white
									pine, red pine

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
41D:	5								
Farmington		Moderate	Moderate	Severe	Moderate	eastern hemlock	50	---	European larch, eastern white pine, red pine
						northern red oak	50	29.00	
						sugar maple	50	29.00	
						white ash	55	29.00	
						eastern white pine	55	86.00	
						American basswood	55	29.00	
41E:	5								
Galway		Severe	Severe	Slight	Moderate	white ash	75	43.00	European larch, Norway spruce, eastern white pine, red pine
						northern red oak	70	57.00	
						sugar maple	65	43.00	
Farmington		Severe	Severe	Severe	Moderate	eastern hemlock	50	---	European larch, eastern white pine, red pine
						northern red oak	50	29.00	
						sugar maple	50	29.00	
						white ash	55	29.00	
						eastern white pine	55	86.00	
						American basswood	55	29.00	
42C:	4								
Macomber		Slight	Slight	Slight	Moderate	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						paper birch	60	57.00	
						red spruce	55	129.00	
						sugar maple	65	43.00	
						white spruce	65	143.00	
						white oak	70	57.00	
						northern red oak	70	57.00	
						balsam fir	65	129.00	
Taconic		Slight	Slight	Severe	Moderate	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						northern red oak	50	29.00	
						red spruce	40	86.00	
						white oak	50	29.00	
						white spruce	50	114.00	
						paper birch	53	57.00	
						balsam fir	50	100.00	
						sugar maple	50	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
42D:	6								
Macomber----------------		Moderate	Moderate	Slight	Moderate	American beech------	---	---	Norway spruce,
						eastern hemlock-----	---	---	balsam fir,
						paper birch---------	60	57.00	eastern white
						red spruce----------	55	129.00	pine, red pine,
						sugar maple---------	65	43.00	white spruce
						white spruce--------	65	143.00	
						white oak-----------	70	57.00	
						northern red oak----	70	57.00	
						balsam fir----------	65	129.00	
Taconic-----------------		Moderate	Moderate	Moderate	Severe	American beech------	---	---	Norway spruce,
						eastern hemlock-----	---	---	balsam fir,
						northern red oak----	50	29.00	eastern white
						red spruce----------	40	86.00	pine, red pine,
						white oak-----------	50	29.00	white spruce
						white spruce--------	50	114.00	
						paper birch---------	53	57.00	
						balsam fir----------	50	100.00	
						sugar maple---------	50	29.00	
42E:	6								
Macomber----------------		Severe	Severe	Slight	Moderate	American beech------	---	---	Norway spruce,
						eastern hemlock-----	---	---	balsam fir,
						paper birch---------	60	57.00	eastern white
						red spruce----------	55	129.00	pine, red pine,
						sugar maple---------	65	43.00	white spruce
						white spruce--------	65	143.00	
						white oak-----------	70	57.00	
						northern red oak----	70	57.00	
						balsam fir----------	65	129.00	
Taconic-----------------		Severe	Severe	Moderate	Severe	American beech------	---	---	Norway spruce,
						eastern hemlock-----	---	---	balsam fir,
						northern red oak----	50	29.00	eastern white
						red spruce----------	40	86.00	pine, red pine,
						white oak-----------	50	29.00	white spruce
						white spruce--------	50	114.00	
						paper birch---------	53	57.00	
						balsam fir----------	50	100.00	
						sugar maple---------	50	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
43C:	5								
Taconic		Slight	Slight	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						northern red oak	50	29.00	
						red spruce	40	86.00	
						white oak	50	29.00	
						white spruce	50	114.00	
						paper birch	53	57.00	
						balsam fir	50	100.00	
						sugar maple	50	29.00	
Macomber		Slight	Slight	Slight	Moderate	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						paper birch	60	57.00	
						red spruce	55	129.00	
						sugar maple	65	43.00	
						white spruce	65	143.00	
						white oak	70	57.00	
						northern red oak	70	57.00	
						balsam fir	65	129.00	
43D:	6								
Taconic		Moderate	Moderate	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						northern red oak	50	29.00	
						red spruce	40	86.00	
						white oak	50	29.00	
						white spruce	50	114.00	
						paper birch	53	57.00	
						balsam fir	50	100.00	
						sugar maple	50	29.00	
Macomber		Moderate	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock	---	---	
						paper birch	60	57.00	
						red spruce	55	129.00	
						sugar maple	65	43.00	
						white spruce	65	143.00	
						white oak	70	57.00	
						northern red oak	70	57.00	
						balsam fir	65	129.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
43E:	6								
Taconic-----------------		Severe	Severe	Moderate	Severe	American beech------	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock-----	---	---	
						northern red oak----	50	29.00	
						red spruce----------	40	86.00	
						white oak-----------	50	29.00	
						white spruce--------	50	114.00	
						paper birch---------	53	57.00	
						balsam fir----------	50	100.00	
						sugar maple---------	50	29.00	
Macomber----------------		Severe	Severe	Slight	Moderate	American beech------	---	---	Norway spruce, balsam fir, eastern white pine, red pine, white spruce
						eastern hemlock-----	---	---	
						paper birch---------	60	57.00	
						red spruce----------	55	129.00	
						sugar maple---------	65	43.00	
						white spruce--------	65	143.00	
						white oak-----------	70	57.00	
						northern red oak----	70	57.00	
						balsam fir----------	65	129.00	
44B:	3								
Dutchess----------------		Slight	Slight	Slight	Slight	eastern hemlock-----	---	---	eastern white pine, red pine
						hickory-------------	---	---	
						white oak-----------	60	43.00	
						eastern white pine--	66	114.00	
						northern red oak----	62	43.00	
						sugar maple---------	60	43.00	
44C:	3								
Dutchess----------------		Slight	Slight	Slight	Slight	eastern hemlock-----	---	---	eastern white pine, red pine
						hickory-------------	---	---	
						white oak-----------	60	43.00	
						eastern white pine--	66	114.00	
						northern red oak----	62	43.00	
						sugar maple---------	60	43.00	
44D:	3								
Dutchess----------------		Moderate	Moderate	Slight	Slight	eastern hemlock-----	---	---	eastern white pine, red pine
						hickory-------------	---	---	
						white oak-----------	60	43.00	
						eastern white pine--	66	114.00	
						northern red oak----	62	43.00	
						sugar maple---------	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
47C:	3								
Dutchess		Slight	Slight	Slight	Slight	eastern hemlock	---	---	eastern white pine, red pine
						hickory	---	---	
						white oak	60	43.00	
						eastern white pine	66	114.00	
						northern red oak	62	43.00	
						sugar maple	60	43.00	
47D:	4								
Dutchess		Moderate	Moderate	Slight	Slight	eastern hemlock	---	---	eastern white pine, red pine
						hickory	---	---	
						white oak	60	43.00	
						eastern white pine	66	114.00	
						northern red oak	62	43.00	
						sugar maple	60	43.00	
47E:	5								
Dutchess		Severe	Severe	Slight	Slight	eastern hemlock	---	---	eastern white pine, red pine
						hickory	---	---	
						white oak	60	43.00	
						eastern white pine	66	114.00	
						northern red oak	62	43.00	
						sugar maple	60	43.00	
48B:	2								
Pittstown		Slight	Slight	Slight	Moderate	red spruce	50	114.00	Scotch pine, balsam fir, eastern white pine, white spruce
						eastern white pine	80	143.00	
						northern red oak	72	57.00	
						sugar maple	66	43.00	
48C:	2								
Pittstown		Slight	Slight	Slight	Moderate	red spruce	50	114.00	Scotch pine, balsam fir, eastern white pine, white spruce
						eastern white pine	80	143.00	
						northern red oak	72	57.00	
						sugar maple	66	43.00	
48D:	2								
Pittstown		Moderate	Moderate	Slight	Moderate	red spruce	50	114.00	Scotch pine, balsam fir, eastern white pine, white spruce
						eastern white pine	80	143.00	
						northern red oak	72	57.00	
						sugar maple	66	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
49C:	2								
Pittstown---------------		Slight	Slight	Slight	Moderate	red spruce----------	50	114.00	Scotch pine, balsam fir, eastern white pine, white spruce
						eastern white pine--	80	143.00	
						northern red oak----	72	57.00	
						sugar maple---------	66	43.00	
49D:	2								
Pittstown---------------		Moderate	Moderate	Slight	Moderate	red spruce----------	50	114.00	Scotch pine, balsam fir, eastern white pine, white spruce
						eastern white pine--	80	143.00	
						northern red oak----	72	57.00	
						sugar maple---------	66	43.00	
50B:	5								
Brayton-----------------		Slight	Severe	Moderate	Severe	black spruce--------	---	---	black spruce, red spruce, tamarack
						paper birch---------	60	57.00	
						red spruce----------	50	114.00	
						tamarack------------	60	57.00	
						white spruce--------	48	100.00	
						balsam fir----------	68	129.00	
						eastern white pine--	67	114.00	
						red maple-----------	65	43.00	
51B:	5								
Brayton-----------------		Slight	Severe	Moderate	Severe	black spruce--------	---	---	black spruce, red spruce, tamarack
						paper birch---------	60	57.00	
						red spruce----------	50	114.00	
						tamarack------------	60	57.00	
						white spruce--------	48	100.00	
						balsam fir----------	68	129.00	
						eastern white pine--	67	114.00	
						red maple-----------	65	43.00	
52A:	7								
Mansfield---------------		Slight	Severe	Severe	Severe	red maple-----------	55	29.00	---
						eastern white pine--	55	86.00	
						red spruce----------	45	100.00	
64B:	3								
Stockbridge-------------		Slight	Slight	Slight	Slight	American beech------	---	---	European larch, Norway spruce, eastern white pine, white spruce
						eastern hemlock-----	---	---	
						eastern white pine--	75	143.00	
						northern red oak----	70	57.00	
						sugar maple---------	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns				Potential productivity			Trees to manage
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Common trees	Site index	Volume of wood fiber	
								cu ft/ac	
64C:	3								
Stockbridge-------------		Slight	Slight	Slight	Slight	American beech------	---	---	European larch,
						eastern hemlock-----	---	---	Norway spruce,
						eastern white pine--	75	143.00	eastern white
						northern red oak----	70	57.00	pine, white spruce
						sugar maple---------	60	43.00	
64D:	3								
Stockbridge-------------		Moderate	Moderate	Slight	Slight	American beech------	---	---	European larch,
						eastern hemlock-----	---	---	Norway spruce,
						eastern white pine--	75	143.00	eastern white
						northern red oak----	70	57.00	pine, white spruce
						sugar maple---------	60	43.00	
65C:	3								
Stockbridge-------------		Slight	Slight	Slight	Slight	American beech------	---	---	European larch,
						eastern hemlock-----	---	---	Norway spruce,
						eastern white pine--	75	143.00	eastern white
						northern red oak----	70	57.00	pine, white spruce
						sugar maple---------	60	43.00	
65D:	4								
Stockbridge-------------		Moderate	Moderate	Slight	Slight	American beech------	---	---	European larch,
						eastern hemlock-----	---	---	Norway spruce,
						eastern white pine--	75	143.00	eastern white
						northern red oak----	70	57.00	pine, white spruce
						sugar maple---------	60	43.00	
66A:	3								
Georgia-----------------		Slight	Slight	Slight	Slight	basswood------------	65	43.00	Norway spruce,
						quaking aspen-------	---	---	eastern white
						sugar maple---------	60	43.00	pine, larch
						white ash-----------	66	43.00	
						yellow birch--------	60	43.00	
						eastern white pine--	75	143.00	
						red maple-----------	70	43.00	
						northern red oak----	70	57.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
66B:	3								
Georgia-----------------		Slight	Slight	Slight	Slight	basswood-----------	65	43.00	Norway spruce, eastern white pine, larch
						quaking aspen-------	---	---	
						sugar maple---------	60	43.00	
						white ash-----------	66	43.00	
						yellow birch--------	60	43.00	
						eastern white pine--	75	143.00	
						red maple-----------	70	43.00	
						northern red oak----	70	57.00	
66C:	3								
Georgia-----------------		Slight	Slight	Slight	Slight	basswood-----------	65	43.00	Norway spruce, eastern white pine, larch
						quaking aspen-------	---	---	
						sugar maple---------	60	43.00	
						white ash-----------	66	43.00	
						yellow birch--------	60	43.00	
						eastern white pine--	75	143.00	
						red maple-----------	70	43.00	
						northern red oak----	70	57.00	
66D:	3								
Georgia-----------------		Moderate	Moderate	Slight	Slight	basswood-----------	65	43.00	Norway spruce, eastern white pine, larch
						quaking aspen-------	---	---	
						sugar maple---------	60	43.00	
						white ash-----------	66	43.00	
						yellow birch--------	60	43.00	
						eastern white pine--	75	143.00	
						red maple-----------	70	43.00	
						northern red oak----	70	57.00	
67B:	3								
Georgia-----------------		Slight	Slight	Slight	Slight	sugar maple---------	60	43.00	Norway spruce, eastern white pine, larch
						eastern white pine--	75	143.00	
						northern red oak----	70	57.00	
						basswood-----------	65	43.00	
67C:	3								
Georgia-----------------		Slight	Slight	Slight	Slight	sugar maple---------	60	43.00	Norway spruce, eastern white pine, larch
						eastern white pine--	75	143.00	
						northern red oak----	70	57.00	
						basswood-----------	65	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
68A:	4								
Massena		Slight	Moderate	Moderate	Moderate	red maple	75	43.00	eastern arborvitae, eastern white pine, white spruce
						eastern white pine	75	143.00	
						northern red oak	70	57.00	
68B:	4								
Massena		Slight	Moderate	Moderate	Moderate	red maple	75	43.00	eastern arborvitae, eastern white pine, white spruce
						eastern white pine	75	143.00	
						northern red oak	70	57.00	
69A:	4								
Massena		Slight	Moderate	Moderate	Moderate	red maple	75	43.00	eastern arborvitae, eastern white pine, white spruce
						eastern white pine	75	143.00	
						northern red oak	70	57.00	
69B:	4								
Massena		Slight	Moderate	Moderate	Moderate	red maple	75	43.00	eastern arborvitae, eastern white pine, white spruce
						eastern white pine	75	143.00	
						northern red oak	70	57.00	
70A:	2								
Groton		Slight	Slight	Severe	Slight	northern red oak	55	43.00	European larch, eastern white pine
						red pine	60	86.00	
						eastern white pine	60	100.00	
						sugar maple	55	43.00	
70B:	2								
Groton		Slight	Slight	Severe	Slight	northern red oak	55	43.00	European larch, eastern white pine
						red pine	60	86.00	
						eastern white pine	60	100.00	
						sugar maple	55	43.00	
70C:	2								
Groton		Slight	Slight	Severe	Slight	northern red oak	55	43.00	European larch, eastern white pine
						red pine	60	86.00	
						eastern white pine	60	100.00	
						sugar maple	55	43.00	
70D:	3								
Groton		Moderate	Moderate	Severe	Slight	northern red oak	55	43.00	European larch, eastern white pine
						red pine	60	86.00	
						eastern white pine	60	100.00	
						sugar maple	55	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
70E:	3								
Groton------------------		Severe	Severe	Severe	Slight	northern red oak----	55	43.00	European larch,
						red pine------------	60	86.00	eastern white pine
						eastern white pine--	60	100.00	
						sugar maple---------	55	43.00	
71A:	1								
Hero--------------------		Slight	Slight	Slight	Slight	eastern white pine--	70	129.00	European larch,
						northern red oak----	65	43.00	eastern white
									pine, white spruce
71B:	1								
Hero--------------------		Slight	Slight	Slight	Slight	eastern white pine--	70	129.00	European larch,
						northern red oak----	65	43.00	eastern white
									pine, white spruce
72A:	5								
Fredon------------------		Slight	Severe	Severe	Severe	northern red oak----	60	43.00	Norway spruce,
						tuliptree-----------	80	72.00	eastern white
						red maple-----------	70	43.00	pine, tuliptree,
						eastern white pine--	70	129.00	white spruce
84B:	1								
Nellis------------------		Slight	Slight	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
84C:	1								
Nellis------------------		Slight	Slight	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
84D:	2								
Nellis------------------		Moderate	Moderate	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
85B:	2								
Nellis------------------		Slight	Slight	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
85C:	2								
Nellis------------------		Slight	Slight	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
85D:	3								
Nellis------------------		Moderate	Moderate	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine
85E:	3								
Nellis------------------		Moderate	Severe	Slight	Slight	American basswood---	80	57.00	Austrian pine,
						sugar maple---------	70	43.00	Douglas fir,
						white ash-----------	85	57.00	European larch,
						eastern white pine--	85	143.00	Norway spruce,
						northern red oak----	80	57.00	black walnut,
									eastern white pine

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
86A:	1								
Amenia------------------		Slight	Slight	Slight	Slight	American basswood---	---	---	European larch,
						sugar maple---------	65	43.00	Norway spruce,
						white ash-----------	75	43.00	eastern white
						eastern white pine--	75	143.00	pine, red pine
						northern red oak----	70	57.00	
86B:	1								
Amenia------------------		Slight	Slight	Slight	Slight	American basswood---	---	---	European larch,
						sugar maple---------	65	43.00	Norway spruce,
						white ash-----------	75	43.00	eastern white
						eastern white pine--	75	143.00	pine, red pine
						northern red oak----	70	57.00	
86C:	1								
Amenia------------------		Slight	Slight	Slight	Slight	American basswood---	---	---	European larch,
						sugar maple---------	65	43.00	Norway spruce,
						white ash-----------	75	43.00	eastern white
						eastern white pine--	75	143.00	pine, red pine
						northern red oak----	70	57.00	
87B:	2								
Amenia------------------		Slight	Slight	Slight	Slight	American basswood---	---	---	European larch,
						sugar maple---------	65	43.00	Norway spruce,
						white ash-----------	75	43.00	eastern white
						eastern white pine--	75	143.00	pine, red pine
						northern red oak----	70	57.00	
87C:	2								
Amenia------------------		Slight	Slight	Slight	Slight	American basswood---	---	---	European larch,
						sugar maple---------	65	43.00	Norway spruce,
						white ash-----------	75	43.00	eastern white
						eastern white pine--	75	143.00	pine, red pine
						northern red oak----	70	57.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
90C:	4								
Berkshire		Slight	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
90E:	5								
Berkshire		Severe	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
93B:	2								
Pittsfield		Slight	Slight	Slight	Slight	northern red oak	70	57.00	Douglas fir, European larch, Fraser's fir, Norway spruce, eastern white pine, white spruce
						eastern white pine	65	114.00	
						sugar maple	63	43.00	
93C:	2								
Pittsfield		Slight	Slight	Slight	Slight	northern red oak	70	57.00	Douglas fir, European larch, Fraser's fir, Norway spruce, eastern white pine, white spruce
						eastern white pine	65	114.00	
						sugar maple	63	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
93D:	3								
Pittsfield--------------		Moderate	Moderate	Slight	Slight	northern red oak----	70	57.00	Douglas fir,
						eastern white pine--	65	114.00	European larch,
						sugar maple---------	63	43.00	Fraser's fir,
									Norway spruce,
									eastern white
									pine, white spruce
94B:	3								
Pittsfield--------------		Slight	Slight	Slight	Slight	northern red oak----	70	57.00	Douglas fir,
						eastern white pine--	65	114.00	European larch,
						sugar maple---------	63	43.00	Fraser's fir,
									Norway spruce,
									eastern white
									pine, white spruce
94C:	3								
Pittsfield--------------		Slight	Slight	Slight	Slight	northern red oak----	70	57.00	Douglas fir,
						eastern white pine--	65	114.00	European larch,
						sugar maple---------	63	43.00	Fraser's fir,
									Norway spruce,
									eastern white
									pine, white spruce
94D:	4								
Pittsfield--------------		Moderate	Moderate	Slight	Slight	northern red oak----	70	57.00	Douglas fir,
						eastern white pine--	65	114.00	European larch,
						sugar maple---------	63	43.00	Fraser's fir,
									Norway spruce,
									eastern white
									pine, white spruce
94E:	5								
Pittsfield--------------		Severe	Severe	Slight	Slight	northern red oak----	70	57.00	Douglas fir,
						eastern white pine--	65	114.00	European larch,
						sugar maple---------	63	43.00	Fraser's fir,
									Norway spruce,
									eastern white
									pine, white spruce

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
95C:	3								
Houghtonville-----------		Moderate	Moderate	Slight	Slight	balsam fir----------	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce----------	50	114.00	
						sugar maple---------	60	43.00	
						white spruce--------	55	129.00	
						yellow birch--------	54	29.00	
						paper birch---------	66	72.00	
						American beech------	65	43.00	
						white ash-----------	65	43.00	
95D:	4								
Houghtonville-----------		Severe	Moderate	Slight	Slight	balsam fir----------	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce----------	50	114.00	
						sugar maple---------	60	43.00	
						white spruce--------	55	129.00	
						yellow birch--------	54	29.00	
						paper birch---------	66	72.00	
						American beech------	65	43.00	
						white ash-----------	65	43.00	
95E:	5								
Houghtonville-----------		Severe	Severe	Slight	Slight	balsam fir----------	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce----------	50	114.00	
						sugar maple---------	60	43.00	
						white spruce--------	55	129.00	
						yellow birch--------	54	29.00	
						paper birch---------	66	72.00	
						American beech------	65	43.00	
						white ash-----------	65	43.00	
96D:	6								
Hogback-----------------		Severe	Severe	Moderate	Severe	American beech------	---	---	Norway spruce, balsam fir, eastern white pine, red spruce
						balsam fir----------	48	86.00	
						paper birch---------	---	---	
						red spruce----------	42	86.00	
						sugar maple---------	50	29.00	
						yellow birch--------	---	---	
						northern red oak----	63	43.00	
						white spruce--------	55	129.00	
						eastern white pine--	55	86.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
96D:	6								
Rawsonville-------------		Severe	Moderate	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam
						eastern hemlock-----	---	---	fir, eastern white
						paper birch---------	---	---	pine, red spruce,
						red maple-----------	---	---	tamarack, white
						red spruce----------	45	100.00	spruce
						white spruce--------	55	129.00	
						yellow birch--------	55	29.00	
						white ash-----------	67	43.00	
						American beech------	64	43.00	
						sugar maple---------	60	43.00	
Rock Outcrop------------		---	---	---	---	---	---	---	---
96F:	6								
Hogback-----------------		Severe	Severe	Moderate	Severe	American beech------	---	---	Norway spruce,
						balsam fir----------	48	86.00	balsam fir,
						paper birch---------	---	---	eastern white
						red spruce----------	42	86.00	pine, red spruce
						sugar maple---------	50	29.00	
						yellow birch--------	---	---	
						northern red oak----	63	43.00	
						white spruce--------	55	129.00	
						eastern white pine--	55	86.00	
Rawsonville-------------		Severe	Severe	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam
						eastern hemlock-----	---	---	fir, eastern white
						paper birch---------	---	---	pine, red spruce,
						red maple-----------	---	---	tamarack, white
						red spruce----------	45	100.00	spruce
						white spruce--------	55	129.00	
						yellow birch--------	55	29.00	
						white ash-----------	67	43.00	
						American beech------	64	43.00	
						sugar maple---------	60	43.00	
Rock Outcrop------------		---	---	---	---	---	---	---	---

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
100B:	6								
Wilmington		Slight	Severe	Moderate	Moderate	balsam fir	---	---	Norway spruce, balsam fir, eastern arborvitae, eastern white pine, white spruce
						black cherry	---	---	
						quaking aspen	---	---	
						red maple	40	29.00	
						sugar maple	---	---	
						yellow birch	---	---	
						eastern hemlock	60	29.00	
						white spruce	45	100.00	
						red spruce	45	100.00	
102B:	1								
Mundal		Slight	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir	55	114.00	
						paper birch	---	---	
						red maple	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						yellow birch	---	---	
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	
102C:	1								
Mundal		Moderate	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir	55	114.00	
						paper birch	---	---	
						red maple	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						yellow birch	---	---	
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	
104B:	4								
Colton		Slight	Moderate	Severe	Slight	red pine	52	86.00	European larch, eastern white pine, red pine
						red spruce	39	86.00	
						eastern white pine	62	114.00	
						sugar maple	61	43.00	
						white spruce	52	114.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
104C:	4								
Colton		Slight	Moderate	Severe	Slight	red pine	52	86.00	European larch, eastern white pine, red pine
						red spruce	39	86.00	
						eastern white pine	62	114.00	
						sugar maple	61	43.00	
						white spruce	52	114.00	
104E:	5								
Colton		Severe	Moderate	Severe	Slight	red pine	52	86.00	European larch, eastern white pine, red pine
						red spruce	39	86.00	
						eastern white pine	62	114.00	
						sugar maple	61	43.00	
						white spruce	52	114.00	
105B:	3								
Monadnock		Slight	Slight	Slight	Slight	northern red oak	55	43.00	eastern white pine, red pine, white spruce
						eastern white pine	63	114.00	
						red pine	60	100.00	
						white spruce	55	129.00	
105C:	3								
Monadnock		Slight	Slight	Slight	Slight	northern red oak	55	43.00	eastern white pine, red pine, white spruce
						eastern white pine	63	114.00	
						red pine	60	100.00	
						white spruce	55	129.00	
105D:	4								
Monadnock		Moderate	Moderate	Slight	Slight	northern red oak	55	43.00	eastern white pine, red pine, white spruce
						eastern white pine	63	114.00	
						red pine	60	100.00	
						white spruce	55	129.00	
105E:	5								
Monadnock		Severe	Severe	Slight	Slight	northern red oak	55	43.00	eastern white pine, red pine, white spruce
						eastern white pine	63	114.00	
						red pine	60	100.00	
						white spruce	55	129.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
106B:	3								
Berkshire		Slight	Slight	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
106C:	3								
Berkshire		Slight	Slight	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
106D:	4								
Berkshire		Moderate	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
106E:	5								
Berkshire		Severe	Severe	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
108B:	3								
Peru--------------------		Slight	Slight	Slight	Moderate	balsam fir----------	55	114.00	eastern white pine, white spruce
						red pine------------	61	100.00	
						red spruce----------	39	86.00	
						sugar maple---------	60	43.00	
						white spruce--------	53	114.00	
						yellow birch--------	60	43.00	
						northern red oak----	70	57.00	
						eastern white pine--	67	114.00	
						white ash-----------	64	43.00	
108C:	3								
Peru--------------------		Slight	Slight	Slight	Moderate	balsam fir----------	55	114.00	eastern white pine, white spruce
						red pine------------	61	100.00	
						red spruce----------	39	86.00	
						sugar maple---------	60	43.00	
						white spruce--------	53	114.00	
						yellow birch--------	60	43.00	
						northern red oak----	70	57.00	
						eastern white pine--	67	114.00	
						white ash-----------	64	43.00	
108D:	4								
Peru--------------------		Moderate	Moderate	Slight	Moderate	balsam fir----------	55	114.00	eastern white pine, white spruce
						red pine------------	61	100.00	
						red spruce----------	39	86.00	
						sugar maple---------	60	43.00	
						white spruce--------	53	114.00	
						yellow birch--------	60	43.00	
						northern red oak----	70	57.00	
						eastern white pine--	67	114.00	
						white ash-----------	64	43.00	
109C:	3								
Tunbridge---------------		Slight	Slight	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine--	50	86.00	
						northern red oak----	---	---	
						paper birch---------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						white ash-----------	65	43.00	
						sugar maple---------	60	43.00	
						yellow birch--------	55	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
109C:	3								
Berkshire		Slight	Slight	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
109D:	4								
Tunbridge		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	
Berkshire		Moderate	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
109E:	5								
Tunbridge		Severe	Severe	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
109E:	5								
Berkshire		Severe	Severe	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
111C:	4								
Rawsonville		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	
Houghtonville		Moderate	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
111D:	5								
Rawsonville		Severe	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
111D:	5								
Houghtonville		Severe	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
111E:	5								
Rawsonville		Severe	Severe	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	
Houghtonville		Severe	Severe	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
112C:	5								
Rawsonville		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
112C:	5								
Hogback		Moderate	Severe	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red spruce
						balsam fir	48	86.00	
						paper birch	---	---	
						red spruce	42	86.00	
						sugar maple	50	29.00	
						yellow birch	---	---	
						northern red oak	63	43.00	
						white spruce	55	129.00	
						eastern white pine	55	86.00	
112D:	5								
Rawsonville		Severe	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	
Hogback		Severe	Severe	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red spruce
						balsam fir	48	86.00	
						paper birch	---	---	
						red spruce	42	86.00	
						sugar maple	50	29.00	
						yellow birch	---	---	
						northern red oak	63	43.00	
						white spruce	55	129.00	
						eastern white pine	55	86.00	
112E:	6								
Rawsonville		Severe	Severe	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
112E:	6								
Hogback		Severe	Severe	Moderate	Severe	American beech	---	---	Norway spruce,
						balsam fir	48	86.00	balsam fir,
						paper birch	---	---	eastern white
						red spruce	42	86.00	pine, red spruce
						sugar maple	50	29.00	
						yellow birch	---	---	
						northern red oak	63	43.00	
						white spruce	55	129.00	
						eastern white pine	55	86.00	
113B:	5								
Cabot		Slight	Severe	Moderate	Severe	balsam fir	---	---	eastern white pine,
						eastern arborvitae	---	---	white spruce
						eastern white pine	---	---	
						elm	---	---	
						hemlock	---	---	
						red spruce	---	---	
						tamarack	---	---	
						red maple	60	43.00	
						white spruce	60	143.00	
						sugar maple	56	29.00	
114B:	2								
Mundal		Slight	Moderate	Slight	Moderate	American beech	---	---	Norway spruce,
						balsam fir	55	114.00	Scotch pine,
						paper birch	---	---	balsam fir,
						red maple	---	---	eastern white
						red spruce	50	114.00	pine, red spruce,
						white spruce	55	129.00	tamarack, white
						yellow birch	---	---	spruce
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
114C:	2								
Mundal------------------		Moderate	Moderate	Slight	Moderate	American beech------	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir----------	55	114.00	
						paper birch---------	---	---	
						red maple-----------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						yellow birch--------	---	---	
						white ash-----------	75	43.00	
						eastern white pine--	67	114.00	
						sugar maple---------	65	43.00	
114D:	3								
Mundal------------------		Severe	Moderate	Slight	Moderate	American beech------	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir----------	55	114.00	
						paper birch---------	---	---	
						red maple-----------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						yellow birch--------	---	---	
						white ash-----------	75	43.00	
						eastern white pine--	67	114.00	
						sugar maple---------	65	43.00	
115B:	2								
Peru--------------------		Slight	Slight	Slight	Moderate	balsam fir----------	55	114.00	eastern white pine, white spruce
						red pine------------	61	100.00	
						red spruce----------	39	86.00	
						sugar maple---------	60	43.00	
						white spruce--------	53	114.00	
						yellow birch--------	60	43.00	
						eastern white pine--	67	114.00	
						northern red oak----	67	43.00	
						white ash-----------	64	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
115C:	2								
Peru		Slight	Slight	Slight	Moderate	balsam fir	55	114.00	eastern white pine, white spruce
						red pine	61	100.00	
						red spruce	39	86.00	
						sugar maple	60	43.00	
						white spruce	53	114.00	
						yellow birch	60	43.00	
						eastern white pine	67	114.00	
						northern red oak	67	43.00	
						white ash	64	43.00	
115D:	3								
Peru		Moderate	Moderate	Slight	Moderate	balsam fir	55	114.00	eastern white pine, white spruce
						red pine	61	100.00	
						red spruce	39	86.00	
						sugar maple	60	43.00	
						white spruce	53	114.00	
						yellow birch	60	43.00	
						eastern white pine	67	114.00	
						northern red oak	67	43.00	
						white ash	64	43.00	
116D:	6								
Lyman		Moderate	Moderate	Moderate	Severe	red spruce	40	86.00	balsam fir, eastern white pine, red pine, white spruce
						balsam fir	60	114.00	
						white spruce	55	129.00	
						sugar maple	50	29.00	
Tunbridge		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	
Rock Outcrop		---	---	---	---	---	---	---	---

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
116F:	6								
Lyman-------------------		Severe	Severe	Moderate	Severe	red spruce----------	40	86.00	balsam fir, eastern
						balsam fir----------	60	114.00	white pine, red
						white spruce--------	55	129.00	pine, white spruce
						sugar maple---------	50	29.00	
Tunbridge---------------		Severe	Severe	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam
						eastern white pine--	50	86.00	fir, eastern white
						northern red oak----	---	---	pine, red spruce,
						paper birch---------	---	---	tamarack, white
						red spruce----------	50	114.00	spruce
						white spruce--------	55	129.00	
						white ash-----------	65	43.00	
						sugar maple---------	60	43.00	
						yellow birch--------	55	29.00	
Rock Outcrop------------		---	---	---	---	---	---	---	---
117B:	2								
Berkshire---------------		Slight	Slight	Slight	Slight	balsam fir----------	60	114.00	Douglas fir, balsam
						paper birch---------	60	57.00	fir, eastern white
						red spruce----------	50	114.00	pine, red pine,
						sugar maple---------	52	29.00	white spruce
						white spruce--------	55	129.00	
						yellow birch--------	55	29.00	
						eastern white pine--	72	129.00	
						red pine------------	65	114.00	
						white ash-----------	62	43.00	
117C:	2								
Berkshire---------------		Slight	Slight	Slight	Slight	balsam fir----------	60	114.00	Douglas fir, balsam
						paper birch---------	60	57.00	fir, eastern white
						red spruce----------	50	114.00	pine, red pine,
						sugar maple---------	52	29.00	white spruce
						white spruce--------	55	129.00	
						yellow birch--------	55	29.00	
						eastern white pine--	72	129.00	
						red pine------------	65	114.00	
						white ash-----------	62	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
117D:	3								
Berkshire		Moderate	Moderate	Slight	Slight	balsam fir	60	114.00	Douglas fir, balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
118C:	4								
Tunbridge		Slight	Slight	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	
Lyman		Slight	Slight	Moderate	Severe	red spruce	40	86.00	balsam fir, eastern white pine, red pine, white spruce
						balsam fir	60	114.00	
						white spruce	55	129.00	
						sugar maple	50	29.00	
118D:	5								
Tunbridge		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	
Lyman		Moderate	Moderate	Moderate	Severe	red spruce	40	86.00	balsam fir, eastern white pine, red pine, white spruce
						balsam fir	60	114.00	
						white spruce	55	129.00	
						sugar maple	50	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
118E:	5								
Tunbridge---------------		Severe	Severe	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine--	50	86.00	
						northern red oak----	---	---	
						paper birch---------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						white ash-----------	65	43.00	
						sugar maple---------	60	43.00	
						yellow birch--------	55	29.00	
Lyman-------------------		Severe	Severe	Moderate	Severe	red spruce----------	40	86.00	balsam fir, eastern white pine, red pine, white spruce
						balsam fir----------	60	114.00	
						white spruce--------	55	129.00	
						sugar maple---------	50	29.00	
221F:	5								
Tunbridge---------------		Severe	Severe	Slight	Moderate	balsam fir----------	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine--	50	86.00	
						northern red oak----	---	---	
						paper birch---------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						white ash-----------	65	43.00	
						sugar maple---------	60	43.00	
						yellow birch--------	55	29.00	
Berkshire---------------		Moderate	Severe	Slight	Slight	balsam fir----------	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch---------	60	57.00	
						red spruce----------	50	114.00	
						sugar maple---------	52	29.00	
						white spruce--------	55	129.00	
						yellow birch--------	55	29.00	
						eastern white pine--	72	129.00	
						red pine------------	65	114.00	
						white ash-----------	62	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
403B:	6								
Cabot		Slight	Severe	Moderate	Severe	balsam fir	---	---	eastern white pine, white spruce
						eastern arborvitae	---	---	
						eastern white pine	---	---	
						elm	---	---	
						hemlock	---	---	
						red spruce	---	---	
						tamarack	---	---	
						red maple	60	43.00	
						white spruce	60	143.00	
						sugar maple	56	29.00	
Carlisle		Slight	Severe	Severe	Severe	green ash	---	---	---
						quaking aspen	---	---	
						swamp white oak	---	---	
						silver maple	82	29.00	
						red maple	56	29.00	
						white ash	---	---	
405D:	5								
Berkshire		Moderate	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
Tunbridge		Moderate	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern white pine	50	86.00	
						northern red oak	---	---	
						paper birch	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						white ash	65	43.00	
						sugar maple	60	43.00	
						yellow birch	55	29.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
413D:	5								
Peru		Moderate	Moderate	Slight	Moderate	balsam fir	55	114.00	eastern white pine, white spruce
						red pine	61	100.00	
						red spruce	39	86.00	
						sugar maple	60	43.00	
						white spruce	53	114.00	
						yellow birch	60	43.00	
						northern red oak	70	57.00	
						eastern white pine	67	114.00	
						white ash	64	43.00	
Berkshire		Moderate	Moderate	Slight	Slight	balsam fir	60	114.00	balsam fir, eastern white pine, red pine, white spruce
						paper birch	60	57.00	
						red spruce	50	114.00	
						sugar maple	52	29.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						eastern white pine	72	129.00	
						red pine	65	114.00	
						white ash	62	43.00	
Cabot		Slight	Severe	Moderate	Severe	balsam fir	---	---	eastern white pine, white spruce
						eastern arborvitae	---	---	
						eastern white pine	---	---	
						elm	---	---	
						hemlock	---	---	
						red spruce	---	---	
						tamarack	---	---	
						red maple	60	43.00	
						white spruce	60	143.00	
						sugar maple	56	29.00	
702E:	6								
Rawsonville		Severe	Severe	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
702E:	6								
Hogback		Severe	Severe	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red spruce
						balsam fir	48	86.00	
						paper birch	---	---	
						red spruce	42	86.00	
						sugar maple	50	29.00	
						yellow birch	---	---	
						northern red oak	63	43.00	
						white spruce	55	129.00	
						eastern white pine	55	86.00	
703C:	3								
Mundal		Moderate	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir	55	114.00	
						paper birch	---	---	
						red maple	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						yellow birch	---	---	
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	
Houghtonville		Moderate	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
705D:	5								
Rawsonville		Severe	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber (cu ft/ac)	Trees to manage
705D:	5								
Houghtonville		Severe	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
Mundal		Severe	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir	55	114.00	
						paper birch	---	---	
						red maple	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						yellow birch	---	---	
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	
715D:	4								
Houghtonville		Severe	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
Rawsonville		Severe	Moderate	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
902F:	6								
Hogback		Severe	Severe	Moderate	Severe	American beech	---	---	Norway spruce, balsam fir, eastern white pine, red spruce
						balsam fir	48	86.00	
						paper birch	---	---	
						red spruce	42	86.00	
						sugar maple	50	29.00	
						yellow birch	---	---	
						northern red oak	63	43.00	
						white spruce	55	129.00	
						eastern white pine	55	86.00	
Rawsonville		Severe	Severe	Slight	Moderate	balsam fir	---	---	Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						eastern hemlock	---	---	
						paper birch	---	---	
						red maple	---	---	
						red spruce	45	100.00	
						white spruce	55	129.00	
						yellow birch	55	29.00	
						white ash	67	43.00	
						American beech	64	43.00	
						sugar maple	60	43.00	
Rock Outcrop		---	---	---	---	---	---	---	---
903C:	4								
Mundal		Moderate	Moderate	Slight	Moderate	American beech	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir	55	114.00	
						paper birch	---	---	
						red maple	---	---	
						red spruce	50	114.00	
						white spruce	55	129.00	
						yellow birch	---	---	
						white ash	75	43.00	
						eastern white pine	67	114.00	
						sugar maple	65	43.00	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Management concerns: Equipment limitation	Management concerns: Seedling mortality	Management concerns: Windthrow hazard	Potential productivity: Common trees	Potential productivity: Site index	Potential productivity: Volume of wood fiber	Trees to manage
								cu ft/ac	
903C:	4								
Wilmington		Slight	Severe	Moderate	Moderate	balsam fir	---	---	Norway spruce, balsam fir, eastern arborvitae, eastern white pine, white spruce
						black cherry	---	---	
						quaking aspen	---	---	
						red maple	40	29.00	
						sugar maple	---	---	
						yellow birch	---	---	
						eastern hemlock	60	29.00	
						white spruce	45	100.00	
						red spruce	45	100.00	
905D:	4								
Houghtonville		Severe	Moderate	Slight	Slight	balsam fir	55	114.00	Norway spruce, Scotch pine, balsam fir, red spruce, tamarack, white spruce
						red spruce	50	114.00	
						sugar maple	60	43.00	
						white spruce	55	129.00	
						yellow birch	54	29.00	
						paper birch	66	72.00	
						American beech	65	43.00	
						white ash	65	43.00	
Monadnock		Moderate	Moderate	Slight	Slight	northern red oak	55	43.00	eastern white pine, red pine, white spruce
						eastern white pine	63	114.00	
						red pine	60	100.00	
						white spruce	55	129.00	
913E:	7								
Glebe		Severe	Severe	Slight	Moderate	American beech	---	---	balsam fir, white spruce
						eastern hemlock	---	---	
						mountain maple	---	---	
						paper birch	---	---	
						sugar maple	---	---	
						yellow birch	---	---	
						red spruce	50	114.00	
						balsam fir	---	---	
						red maple	---	---	

Table 7.—Woodland Management and Productivity—Continued

Map symbol and soil name	VT Forest Value Group	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
								cu ft/ac	
913E:	7								
Stratton----------------		Severe	Severe	Moderate	Severe	American beech------	---	---	balsam fir, white spruce
						eastern hemlock-----	---	---	
						mountain maple------	---	---	
						paper birch---------	---	---	
						sugar maple---------	---	---	
						yellow birch--------	---	---	
						red spruce----------	35	72.00	
						balsam fir----------	---	---	
						red maple-----------	---	---	
923B:	5								
Wilmington-------------		Slight	Severe	Moderate	Moderate	balsam fir----------	---	---	Norway spruce, balsam fir, eastern arborvitae, eastern white pine, white spruce
						black cherry--------	---	---	
						quaking aspen-------	---	---	
						red maple-----------	40	29.00	
						sugar maple---------	---	---	
						yellow birch--------	---	---	
						eastern hemlock-----	60	29.00	
						white spruce--------	45	100.00	
						red spruce----------	45	100.00	
Mundal-----------------		Slight	Moderate	Slight	Moderate	American beech------	---	---	Norway spruce, Scotch pine, balsam fir, eastern white pine, red spruce, tamarack, white spruce
						balsam fir----------	55	114.00	
						paper birch---------	---	---	
						red maple-----------	---	---	
						red spruce----------	50	114.00	
						white spruce--------	55	129.00	
						yellow birch--------	---	---	
						white ash-----------	75	43.00	
						eastern white pine--	67	114.00	
						sugar maple---------	65	43.00	

Table 8.—Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
3A:					
Copake	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: small stones
3B:					
Copake	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: small stones
3C:					
Copake	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: slope small stones
3D:					
Copake	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
3E:					
Copake	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope
9:					
Pits	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: depth to rock
Dumps	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
10D:					
Glebe	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: slope
Stratton	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily fragile	Severe: slope thin layer
Londonderry	Severe: slope fragile depth to rock	Severe: slope fragile depth to rock	Severe: slope fragile depth to rock	Severe: erodes easily fragile	Severe: slope thin layer
10E:					
Glebe	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: slope
Stratton	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: slope thin layer

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
10E:					
Londonderry	Severe: slope fragile depth to rock	Severe: slope fragile depth to rock	Severe: slope fragile depth to rock	Severe: erodes easily slope fragile	Severe: slope thin layer
11F:					
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: large stones slope thin layer
Hubbardton	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: large stones slope thin layer
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock
18B:					
Windsor	Moderate: too sandy	Moderate: too sandy	Moderate: slope too sandy	Moderate: too sandy	Moderate: droughty
18C:					
Windsor	Moderate: slope too sandy	Moderate: slope too sandy	Severe: slope	Moderate: too sandy	Moderate: slope droughty
18E:					
Windsor	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
21A:					
Limerick	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness
23A:					
Adrian	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
Saco	Severe: flooding	Severe: wetness	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness
24A:					
Carlisle	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
25B:					
Belgrade	Moderate: wetness	Moderate: wetness	Moderate: slope wetness	Severe: erodes easily	Moderate: wetness
26A:					
Raynham	Severe: wetness	Severe: wetness	Severe: wetness	Severe: erodes easily wetness	Severe: wetness

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
27B:					
Udipsamments	---	---	---	---	---
Udorthents	---	---	---	---	---
28A:					
Udifluvents	---	---	---	---	---
29A:					
Occum	Severe: flooding	Moderate: flooding	Severe: flooding	Moderate: flooding	Severe: flooding
34A:					
Pootatuck	Severe: flooding	Moderate: flooding wetness	Severe: flooding	Moderate: flooding wetness	Severe: flooding
35B:					
Hartland	Moderate: percs slowly	Moderate: percs slowly	Moderate: percs slowly slope	Severe: erodes easily	Slight
40B:					
Galway	Moderate: wetness	Moderate: wetness	Moderate: slope wetness	Moderate: wetness	Moderate: wetness
Nellis	Moderate: percs slowly	Moderate: percs slowly	Moderate: slope small stones	Slight	Moderate: droughty
Farmington	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Slight	Severe: thin layer
40C:					
Galway	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
Nellis	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: slope droughty
Farmington	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: thin layer
40D:					
Galway	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
Nellis	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: slope thin layer
41C:					
Galway	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
41C:					
Farmington	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: thin layer
41D:					
Galway	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: slope thin layer
41E:					
Galway	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope thin layer
42C:					
Macomber	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: slope small stones droughty
Taconic	Severe: depth to rock	Severe: depth to rock	Severe: slope small stones depth to rock	Slight	Severe: depth to rock
42D:					
Macomber	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: large stones slope	Severe: slope droughty
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Moderate: large stones slope	Severe: large stones slope thin layer
42E:					
Macomber	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope droughty
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: large stones slope thin layer
43C:					
Taconic	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope small stones	Moderate: large stones	Severe: large stones thin layer

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
43C:					
Macomber----------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: large stones	Severe: droughty
43D:					
Taconic----------------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Moderate: large stones slope	Severe: large stones slope thin layer
Macomber----------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: large stones slope	Severe: slope droughty
43E:					
Taconic----------------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: large stones slope thin layer
Macomber----------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope droughty
44B:					
Dutchess----------------	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: large stones small stones
44C:					
Dutchess----------------	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: small stones
44D:					
Dutchess----------------	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
47C:					
Dutchess----------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones
47D:					
Dutchess----------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
47E:					
Dutchess----------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
48B:					
Pittstown--------------	Moderate: wetness	Moderate: wetness	Moderate: slope small stones wetness	Moderate: wetness	Slight
48C:					
Pittstown--------------	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope
48D:					
Pittstown--------------	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
49C:					
Pittstown--------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope
49D:					
Pittstown--------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
50B:					
Brayton----------------	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
51B:					
Brayton----------------	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
52A:					
Mansfield--------------	Severe: ponding	Severe: ponding	Severe: large stones ponding	Severe: ponding	Severe: ponding
64B:					
Stockbridge------------	Moderate: percs slowly	Moderate: percs slowly	Moderate: slope small stones	Slight	Slight
64C:					
Stockbridge------------	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: slope
64D:					
Stockbridge------------	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
65C:					
Stockbridge------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope	Slight	Moderate: large stones slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
65D:					
Stockbridge	Severe: slope	Severe: slope	Severe: large stones slope	Moderate: slope	Severe: slope
66A:					
Georgia	Moderate: wetness	Moderate: wetness	Moderate: small stones	Severe: erodes easily	Moderate: large stones
66B:					
Georgia	Moderate: wetness	Moderate: wetness	Moderate: slope small stones	Severe: erodes easily	Moderate: large stones
66C:					
Georgia	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Severe: erodes easily	Moderate: large stones slope
66D:					
Georgia	Severe: slope	Severe: slope	Severe: slope	Severe: erodes easily	Severe: slope
67B:					
Georgia	Moderate: large stones	Moderate: large stones	Severe: large stones	Moderate: wetness	Moderate: large stones
67C:					
Georgia	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope	Moderate: wetness	Moderate: large stones slope
68A:					
Massena	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: wetness droughty
68B:					
Massena	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: wetness droughty
69A:					
Massena	Severe: wetness	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones wetness
69B:					
Massena	Severe: wetness	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones wetness
70A:					
Groton	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: small stones droughty
70B:					
Groton	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: small stones droughty

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
70C:					
Groton	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: slope small stones droughty
70D:					
Groton	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
70E:					
Groton	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope
71A:					
Hero	Moderate: small stones wetness	Moderate: small stones wetness	Severe: small stones	Moderate: wetness	Moderate: small stones wetness
71B:					
Hero	Moderate: small stones wetness	Moderate: small stones wetness	Severe: small stones	Moderate: wetness	Moderate: small stones wetness
72A:					
Fredon	Severe: flooding wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
84B:					
Nellis	Moderate: percs slowly	Moderate: percs slowly	Moderate: slope small stones	Slight	Moderate: droughty
84C:					
Nellis	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: slope droughty
84D:					
Nellis	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
85B:					
Nellis	Moderate: large stones	Moderate: large stones	Severe: large stones small stones	Slight	Moderate: large stones small stones
85C:					
Nellis	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones
85D:					
Nellis	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
85E:					
Nellis-----------------	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
86A:					
Amenia-----------------	Moderate: wetness	Moderate: wetness	Moderate: small stones	Moderate: wetness	Moderate: wetness
86B:					
Amenia-----------------	Moderate: wetness	Moderate: wetness	Moderate: slope small stones	Moderate: wetness	Moderate: wetness
86C:					
Amenia-----------------	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
87B:					
Amenia-----------------	Moderate: large stones	Moderate: large stones	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones
87C:					
Amenia-----------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
90C:					
Berkshire--------------	Severe: large stones	Severe: large stones	Severe: large stones slope small stones	Moderate: large stones	Severe: large stones
90E:					
Berkshire--------------	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope small stones	Severe: slope	Severe: large stones slope
93B:					
Pittsfield-------------	Slight	Slight	Moderate: slope small stones	Slight	Slight
93C:					
Pittsfield-------------	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope
93D:					
Pittsfield-------------	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
94B:					
Pittsfield-------------	Moderate: large stones	Moderate: large stones	Severe: large stones	Slight	Moderate: large stones
94C:					
Pittsfield-------------	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope	Slight	Moderate: large stones slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
94D:					
Pittsfield-------------	Severe: slope	Severe: slope	Severe: large stones slope	Moderate: slope	Severe: slope
94E:					
Pittsfield-------------	Severe: slope	Severe: slope	Severe: large stones slope	Severe: slope	Severe: slope
95C:					
Houghtonville----------	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
95D:					
Houghtonville----------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
95E:					
Houghtonville----------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
96D:					
Hogback----------------	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily fragile	Severe: large stones slope thin layer
Rawsonville------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Rock Outcrop-----------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: depth to rock
96F:					
Hogback----------------	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: large stones slope thin layer
Rawsonville------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
Rock Outcrop-----------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock
100B:					
Wilmington-------------	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: erodes easily wetness	Severe: wetness

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
102B:					
Mundal	Severe: fragile	Severe: fragile	Severe: fragile	Severe: erodes easily fragile	Moderate: large stones wetness
102C:					
Mundal	Severe: fragile	Severe: fragile	Severe: slope fragile	Severe: erodes easily fragile	Moderate: large stones slope wetness
104B:					
Colton	Severe: large stones	Severe: large stones	Severe: large stones small stones	Moderate: large stones	Severe: small stones too acid droughty
104C:					
Colton	Severe: large stones	Severe: large stones	Severe: large stones slope small stones	Moderate: large stones	Severe: small stones too acid droughty
104E:					
Colton	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope small stones	Severe: slope	Severe: small stones too acid droughty
105B:					
Monadnock	Moderate: large stones	Moderate: large stones	Severe: small stones	Slight	Moderate: large stones
105C:					
Monadnock	Moderate: large stones slope	Moderate: large stones slope	Severe: slope small stones	Slight	Moderate: large stones slope
105D:					
Monadnock	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
105E:					
Monadnock	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope
106B:					
Berkshire	Moderate: large stones small stones	Moderate: large stones small stones	Severe: large stones small stones	Slight	Moderate: large stones small stones
106C:					
Berkshire	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones
106D:					
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
106E:					
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
108B:					
Peru	Moderate: percs slowly wetness	Moderate: percs slowly wetness	Moderate: large stones slope wetness	Moderate: wetness	Moderate: large stones wetness
108C:					
Peru	Moderate: percs slowly slope wetness	Moderate: percs slowly slope wetness	Severe: slope	Moderate: wetness	Severe: large stones slope wetness
108D:					
Peru	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
109C:					
Tunbridge	Moderate: slope small stones	Moderate: slope small stones	Severe: large stones slope small stones	Slight	Moderate: large stones small stones droughty
Berkshire	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones
109D:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
109E:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
111C:					
Rawsonville	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
111C:					
Houghtonville	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
111D:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Houghtonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
111E:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
Houghtonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
112C:					
Rawsonville	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
Hogback	Severe: large stones fragile depth to rock	Severe: large stones fragile depth to rock	Severe: large stones slope depth to rock	Severe: erodes easily fragile	Severe: large stones thin layer
112D:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Hogback	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily fragile	Severe: large stones slope thin layer
112E:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
Hogback	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: large stones slope thin layer
113B:					
Cabot	Severe: wetness	Severe: wetness	Severe: large stones wetness	Severe: wetness	Severe: wetness

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
114B:					
Mundal	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones fragile	Severe: erodes easily fragile	Severe: large stones
114C:					
Mundal	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
114D:					
Mundal	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
115B:					
Peru	Moderate: percs slowly wetness	Moderate: percs slowly wetness	Moderate: slope small stones wetness	Moderate: wetness	Moderate: wetness
115C:					
Peru	Moderate: percs slowly slope wetness	Moderate: percs slowly slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
115D:					
Peru	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
116D:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Moderate: slope	Severe: slope depth to rock
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Moderate: large stones small stones droughty
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: depth to rock
116F:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: slope	Severe: slope depth to rock
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
117B:					
Berkshire	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: large stones small stones
117C:					
Berkshire	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: large stones slope small stones
117D:					
Berkshire	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
118C:					
Tunbridge	Moderate: slope small stones	Moderate: slope small stones	Severe: large stones slope small stones	Slight	Moderate: large stones small stones droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope depth to rock	Slight	Severe: depth to rock
118D:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Moderate: large stones small stones droughty
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Moderate: slope	Severe: slope depth to rock
118E:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: slope	Severe: slope depth to rock
221F:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
403B:					
Cabot	Severe: wetness	Severe: wetness	Severe: large stones wetness	Severe: wetness	Severe: wetness

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
403B:					
Carlisle	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
405D:					
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Moderate: large stones small stones droughty
413D:					
Peru	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
Cabot	Severe: slope wetness	Severe: slope wetness	Severe: large stones slope wetness	Severe: wetness	Severe: slope wetness
702E:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
Hogback	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: large stones slope thin layer
703C:					
Mundal	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
Houghtonville	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
705D:					
Rawsonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Houghtonville	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
705D:					
Mundal-----------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
715D:					
Houghtonville----------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Rawsonville------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
902F:					
Hogback----------------	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: large stones slope thin layer
Rawsonville------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: large stones slope
Rock Outcrop-----------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock
903C:					
Mundal-----------------	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones
Wilmington-------------	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: erodes easily wetness	Severe: wetness
905D:					
Houghtonville----------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily fragile	Severe: large stones slope
Monadnock--------------	Severe: slope	Severe: slope	Severe: slope small stones	Moderate: slope	Severe: slope
913E:					
Glebe------------------	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: large stones slope fragile	Severe: erodes easily slope fragile	Severe: slope
Stratton---------------	Severe: large stones slope	Severe: large stones slope	Severe: large stones slope depth to rock	Severe: erodes easily slope fragile	Severe: slope thin layer

Table 8.—Recreational Development—Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
923B:					
Wilmington	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: erodes easily wetness	Severe: wetness
Mundal	Severe: large stones fragile	Severe: large stones fragile	Severe: large stones fragile	Severe: erodes easily fragile	Severe: large stones

Table 9.—Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	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
3A:										
Copake	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
3B:										
Copake	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
3C:										
Copake	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
3D:										
Copake	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
3E:										
Copake	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
9:										
Pits	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Dumps	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
10D:										
Glebe	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Stratton	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Londonderry	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
10E:										
Glebe	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Stratton	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Londonderry	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
11F:										
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
Hubbardton	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
18B:										
Windsor	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
18C:										
Windsor	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
18E:										
Windsor	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
21A:										
Limerick	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
23A:										
Adrian	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Saco	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
24A:										
Carlisle	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
25B:										
Belgrade	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
26A:										
Raynham	Poor	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair
27B:										
Udipsamments	---	---	---	---	---	---	---	---	---	---
Udorthents	---	---	---	---	---	---	---	---	---	---
28A:										
Udifluvents	---	---	---	---	---	---	---	---	---	---
29A:										
Occum	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
34A:										
Pootatuck	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor
35B:										
Hartland	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
40B:										
Galway	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Nellis	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Farmington	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
40C:										
Galway	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Nellis	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Farmington	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
40D:										
Galway	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Nellis	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Farmington	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
41C:										
Galway	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Farmington	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
41D:										
Galway	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Farmington	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
41E:										
Galway	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Farmington	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
42C:										
Macomber	Fair	Good	Good	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor
Taconic	Very poor	Poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
42D:										
Macomber	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
42E:										
Macomber	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
42E:										
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
43C:										
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
Macomber	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
43D:										
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
Macomber	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
43E:										
Taconic	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
Macomber	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
44B:										
Dutchess	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
44C:										
Dutchess	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
44D:										
Dutchess	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
47C:										
Dutchess	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
47D:										
Dutchess	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
47E:										
Dutchess	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
48B:										
Pittstown	Fair	Good	Good	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
48C:										
Pittstown	Fair	Good	Good	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor
48D:										
Pittstown	Poor	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
49C:										
Pittstown	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
49D:										
Pittstown	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
50B:										
Brayton	Poor	Fair	Fair	Fair	Fair	Good	Poor	Fair	Fair	Fair
51B:										
Brayton	Very poor	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair
52A:										
Mansfield	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Good
64B:										
Stockbridge	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
64C:										
Stockbridge	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
64D:										
Stockbridge	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
65C:										
Stockbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
65D:										
Stockbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
66A:										
Georgia	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
66B:										
Georgia	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
66C:										
Georgia	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
66D:										
Georgia	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
67B:										
Georgia	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
67C: Georgia	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
68A: Massena	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
68B: Massena	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
69A: Massena	Very poor	Poor	Good	Good	Good	Fair	Fair	Poor	Good	Fair
69B: Massena	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
70A: Groton	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
70B: Groton	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
70C: Groton	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
70D: Groton	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
70E: Groton	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
71A: Hero	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
71B: Hero	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
72A: Fredon	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
84B: Nellis	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
84C: Nellis	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
84D: Nellis	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
85B:										
Nellis------------------	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
85C:										
Nellis------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
85D:										
Nellis------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
85E:										
Nellis------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
86A:										
Amenia------------------	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
86B:										
Amenia------------------	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
86C:										
Amenia------------------	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
87B:										
Amenia------------------	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
87C:										
Amenia------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
90C:										
Berkshire---------------	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
90E:										
Berkshire---------------	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
93B:										
Pittsfield--------------	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
93C:										
Pittsfield--------------	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
93D:										
Pittsfield--------------	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
94B:										
Pittsfield--------------	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
94C:										
Pittsfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
94D:										
Pittsfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
94E:										
Pittsfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
95C:										
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
95D:										
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
95E:										
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
96D:										
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
96F:										
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
100B:										
Wilmington	Very poor	Very poor	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
102B:										
Mundal	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
102C:										
Mundal	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
104B:										
Colton	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
104C:										
Colton	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
104E:										
Colton	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
105B:										
Monadnock	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
105C:										
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
105D:										
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
105E:										
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
106B:										
Berkshire	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
106C:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
106D:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
106E:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
108B:										
Peru	Poor	Fair	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor
108C:										
Peru	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
108D:										
Peru	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
109C:										
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
109D:										
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
109E:										
Tunbridge	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
111C:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
111D:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
111E:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
112C:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
112D:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
112E:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
113B:										
Cabot	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
114B:										
Mundal------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
114C:										
Mundal------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
114D:										
Mundal------------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
115B:										
Peru--------------------	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
115C:										
Peru--------------------	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
115D:										
Peru--------------------	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
116D:										
Lyman-------------------	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Tunbridge---------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rock Outcrop------------	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
116F:										
Lyman-------------------	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Tunbridge---------------	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Rock Outcrop------------	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
117B:										
Berkshire---------------	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
117C:										
Berkshire---------------	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
117D:										
Berkshire---------------	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
118C:										
Tunbridge---------------	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
118C:										
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
118D:										
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
118E:										
Tunbridge	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
221F:										
Tunbridge	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
403B:										
Cabot	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Carlisle	Fair	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
405D:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
413D:										
Peru	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Cabot	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
702E:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
703C:										
Mundal	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.—Wildlife Habitat—Continued

Map symbol and soil name	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
705D:										
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Mundal	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
715D:										
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
902F:										
Hogback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Rawsonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
903C:										
Mundal	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Wilmington	Very poor	Very poor	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
905D:										
Houghtonville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
913E:										
Glebe	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Stratton	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
923B:										
Wilmington	Very poor	Very poor	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Mundal	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 10.—Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
3A:						
Copake	Severe: cutbanks cave	Slight	Slight	Slight	Moderate: frost action	Moderate: small stones
3B:						
Copake	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: small stones
3C:						
Copake	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: slope small stones
3D:						
Copake	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
3E:						
Copake	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
9:						
Pits	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
Dumps	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
10D:						
Glebe	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: slope
Stratton	Severe: depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: slope thin layer

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
10D:						
Londonderry	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope thin layer
10E:						
Glebe	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: slope
Stratton	Severe: depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: slope thin layer
Londonderry	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope thin layer
11F:						
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
Hubbardton	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
18B:						
Windsor	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Moderate: droughty
18C:						
Windsor	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: slope droughty
18E:						
Windsor	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
21A:						
Limerick----------------	Severe: wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action wetness	Severe: flooding wetness
23A:						
Adrian------------------	Severe: excess humus ponding cutbanks cave	Severe: low strength subsides ponding	Severe: ponding subsides	Severe: low strength subsides ponding	Severe: frost action subsides ponding	Severe: excess humus ponding
Saco--------------------	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action wetness	Severe: flooding wetness
24A:						
Carlisle----------------	Severe: excess humus ponding	Severe: low strength subsides ponding	Severe: low strength subsides ponding	Severe: low strength subsides ponding	Severe: frost action subsides ponding	Severe: excess humus ponding
25B:						
Belgrade----------------	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: wetness
26A:						
Raynham-----------------	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
27B:						
Udipsamments------------	---	---	---	---	---	---
Udorthents--------------	---	---	---	---	---	---
28A:						
Udifluvents-------------	---	---	---	---	---	---
29A:						
Occum-------------------	Severe: cutbanks cave	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
34A:						
Pootatuck---------------	Severe: wetness cutbanks cave	Severe: flooding	Severe: flooding wetness	Severe: flooding	Severe: flooding	Severe: flooding
35B:						
Hartland----------------	Slight	Slight	Slight	Slight	Severe: frost action	Slight
40B:						
Galway------------------	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: slope depth to rock	Moderate: depth to rock	Slight
Nellis------------------	Moderate: dense layer	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: droughty
Farmington--------------	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: thin layer
40C:						
Galway------------------	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: slope depth to rock	Moderate: slope
Nellis------------------	Moderate: slope dense layer	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: slope droughty
Farmington--------------	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: thin layer
40D:						
Galway------------------	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
Nellis------------------	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Farmington--------------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope thin layer

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
41C:						
Galway	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: slope depth to rock	Moderate: large stones depth to rock small stones
Farmington	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: thin layer
41D:						
Galway	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope thin layer
41E:						
Galway	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope thin layer
42C:						
Macomber	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: slope small stones droughty
Taconic	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
42D:						
Macomber	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope droughty

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
42D:						
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
42E:						
Macomber	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope droughty
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
43C:						
Taconic	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: large stones thin layer
Macomber	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Severe: droughty
43D:						
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
Macomber	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope droughty
43E:						
Taconic	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope thin layer
Macomber	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope droughty

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
44B:						
Dutchess	Slight	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: large stones small stones
44C:						
Dutchess	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: small stones
44D:						
Dutchess	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
47C:						
Dutchess	Moderate: large stones slope	Moderate: large stones slope	Moderate: large stones slope	Severe: slope	Moderate: frost action large stones slope	Moderate: large stones small stones
47D:						
Dutchess	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
47E:						
Dutchess	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
48B:						
Pittstown	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: frost action wetness	Slight
48C:						
Pittstown	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: slope
48D:						
Pittstown	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: slope	Severe: slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
49C:						
Pittstown	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: large stones slope
49D:						
Pittstown	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: slope	Severe: slope
50B:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
51B:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
52A:						
Mansfield	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action ponding	Severe: ponding
64B:						
Stockbridge	Slight	Slight	Slight	Moderate: slope	Moderate: frost action	Slight
64C:						
Stockbridge	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: slope
64D:						
Stockbridge	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
65C:						
Stockbridge	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones slope
65D:						
Stockbridge	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
66A:						
Georgia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Severe: frost action	Moderate: large stones
66B:						
Georgia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones
66C:						
Georgia	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope
66D:						
Georgia	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
67B:						
Georgia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones
67C:						
Georgia	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope
68A:						
Massena	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness droughty
68B:						
Massena	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness droughty
69A:						
Massena	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: large stones small stones wetness

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
69B:						
Massena	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: large stones small stones wetness
70A:						
Groton	Severe: cutbanks cave	Slight	Slight	Slight	Slight	Moderate: small stones droughty
70B:						
Groton	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Moderate: small stones droughty
70C:						
Groton	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: slope small stones droughty
70D:						
Groton	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
70E:						
Groton	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
71A:						
Hero	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: wetness	Severe: frost action	Moderate: small stones wetness
71B:						
Hero	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: small stones wetness
72A:						
Fredon	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: frost action wetness	Severe: wetness

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
84B:						
Nellis	Moderate: dense layer	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: droughty
84C:						
Nellis	Moderate: slope dense layer	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: slope droughty
84D:						
Nellis	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
85B:						
Nellis	Moderate: dense layer	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: large stones small stones
85C:						
Nellis	Moderate: slope dense layer	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones slope small stones
85D:						
Nellis	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
85E:						
Nellis	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
86A:						
Amenia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Severe: frost action	Moderate: wetness
86B:						
Amenia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: wetness
86C:						
Amenia	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope wetness

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
87B:						
Amenia	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones small stones
87C:						
Amenia	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope small stones
90C:						
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Severe: large stones
90E:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: large stones slope
93B:						
Pittsfield	Slight	Slight	Slight	Moderate: slope	Moderate: frost action low strength	Slight
93C:						
Pittsfield	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action low strength slope	Moderate: slope
93D:						
Pittsfield	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
94B:						
Pittsfield	Slight	Slight	Slight	Moderate: slope	Moderate: frost action low strength	Moderate: large stones
94C:						
Pittsfield	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action low strength slope	Moderate: large stones slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
94D:						
Pittsfield	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
94E:						
Pittsfield	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
95C:						
Houghtonville	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Severe: frost action	Severe: large stones
95D:						
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope
95E:						
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope
96D:						
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
96F:						
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
96F:						
Rock Outcrop------------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
100B:						
Wilmington--------------	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
102B:						
Mundal------------------	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones wetness
102C:						
Mundal------------------	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope wetness
104B:						
Colton------------------	Severe: cutbanks cave	Moderate: large stones	Moderate: large stones	Moderate: large stones slope	Moderate: large stones	Severe: small stones too acid droughty
104C:						
Colton------------------	Severe: cutbanks cave	Moderate: large stones slope	Moderate: large stones slope	Severe: slope	Moderate: large stones slope	Severe: small stones too acid droughty
104E:						
Colton------------------	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: small stones too acid droughty
105B:						
Monadnock---------------	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Moderate: large stones
105C:						
Monadnock---------------	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: large stones slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
105D:						
Monadnock	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
105E:						
Monadnock	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
106B:						
Berkshire	Slight	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: large stones small stones
106C:						
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones small stones
106D:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
106E:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
108B:						
Peru	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones wetness
108C:						
Peru	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones slope wetness
108D:						
Peru	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
109C:						
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones small stones droughty
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones small stones
109D:						
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
109E:						
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
111C:						
Rawsonville	Severe: cutbanks cave depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Severe: frost action	Severe: large stones
Houghtonville	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Severe: frost action	Severe: large stones
111D:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
111E:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope
112C:						
Rawsonville	Severe: cutbanks cave depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Severe: frost action	Severe: large stones
Hogback	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: frost action depth to rock	Severe: large stones thin layer
112D:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
112E:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
113B:						
Cabot	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
114B:						
Mundal	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Severe: large stones
114C:						
Mundal	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones
114D:						
Mundal	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: large stones slope
115B:						
Peru	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: wetness
115C:						
Peru	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope wetness
115D:						
Peru	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
116D:						
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
116F:						
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
117B:						
Berkshire	Slight	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: large stones small stones
117C:						
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones slope small stones
117D:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
118C:						
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones small stones droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
118D:						
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
118D:						
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
118E:						
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
221F:						
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
403B:						
Cabot	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Carlisle	Severe: excess humus ponding	Severe: low strength subsides ponding	Severe: low strength subsides ponding	Severe: low strength subsides ponding	Severe: frost action subsides ponding	Severe: excess humus ponding
405D:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
413D:						
Peru	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
413D:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Cabot	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: frost action slope wetness	Severe: slope wetness
702E:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
703C:						
Mundal	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones
Houghtonville	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Severe: frost action	Severe: large stones
705D:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope
Mundal	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: large stones slope
715D:						
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
715D:						
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
902F:						
Hogback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: large stones slope thin layer
Rawsonville	Severe: slope cutbanks cave depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: large stones slope
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
903C:						
Mundal	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Severe: large stones
Wilmington	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
905D:						
Houghtonville	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: frost action slope	Severe: large stones slope
Monadnock	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
913E:						
Glebe	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: frost action slope	Severe: slope
Stratton	Severe: depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: frost action slope depth to rock	Severe: slope thin layer

Table 10.—Building Site Development—Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
923B:						
Wilmington-------------	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Mundal------------------	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Severe: large stones

Table 11.—Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
3A,3B:					
Copake----------	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
3C:					
Copake----------	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
3D,3E:					
Copake----------	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
9:					
Pits------------	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Dumps-----------	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
10D,10E:					
Glebe-----------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Stratton--------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim seepage small stones
Londonderry-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
11F:					
Taconic	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Hubbardton	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: seepage slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope
Rock outcrop	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
18B:					
Windsor	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage too sandy
18C:					
Windsor	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage too sandy
18E:					
Windsor	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage slope too sandy
21A:					
Limerick	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Poor: wetness
23A:					
Adrian	Severe: percs slowly subsides ponding	Severe: excess humus seepage ponding	Severe: seepage too sandy ponding	Severe: seepage ponding	Poor: seepage too sandy ponding
Saco	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
24A:					
Carlisle--------	Severe: percs slowly subsides ponding	Severe: excess humus seepage ponding	Severe: excess humus seepage ponding	Severe: seepage ponding	Poor: excess humus ponding
25B:					
Belgrade--------	Severe: percs slowly wetness	Severe: seepage wetness	Severe: seepage wetness	Severe: wetness	Fair: thin layer wetness
26A:					
Raynham---------	Severe: percs slowly wetness	Moderate: seepage	Severe: wetness	Severe: wetness	Poor: wetness
27B:					
Udipsamments----	---	---	---	---	---
Udorthents------	---	---	---	---	---
28A:					
Udifluvents-----	---	---	---	---	---
29A:					
Occum-----------	Severe: flooding poor filter	Severe: flooding seepage	Severe: flooding seepage wetness	Severe: flooding seepage	Poor: seepage too sandy
34A:					
Pootatuck-------	Severe: flooding wetness poor filter	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Poor: seepage too sandy
35B:					
Hartland--------	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Good

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
40B:					
Galway	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim small stones
Nellis	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Poor: small stones
Farmington	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim
40C:					
Galway	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim small stones
Nellis	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Poor: small stones
Farmington	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim
40D:					
Galway	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope small stones
Nellis	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope
41C:					
Galway	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim small stones
Farmington	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
41D,41E:					
Galway	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope small stones
Farmington	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope
42C:					
Macomber	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim small stones
Taconic	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: depth to rock	Poor: small stones depth to rock
42D,42E:					
Macomber	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope small stones
Taconic	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
43C:					
Taconic	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim small stones
Macomber	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: area reclaim small stones

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
43D,43E:					
Taconic---------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Macomber--------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: area reclaim slope small stones
44B:					
Dutchess--------	Moderate: percs slowly	Moderate: large stones seepage slope	Moderate: large stones	Slight	Poor: small stones
44C:					
Dutchess--------	Moderate: percs slowly slope	Severe: slope	Moderate: large stones slope	Moderate: slope	Poor: small stones
44D:					
Dutchess--------	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
47C:					
Dutchess--------	Moderate: large stones percs slowly slope	Severe: slope	Moderate: large stones slope	Moderate: slope	Poor: small stones
47D,47E:					
Dutchess--------	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
48B:					
Pittstown-------	Severe: percs slowly wetness	Moderate: slope	Severe: wetness	Moderate: wetness	Fair: small stones
48C:					
Pittstown-------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
48D:					
Pittstown-------	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope
49C:					
Pittstown-------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones
49D:					
Pittstown-------	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope
50B:					
Brayton---------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
51B:					
Brayton---------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
52A:					
Mansfield-------	Severe: percs slowly ponding	Severe: ponding	Severe: ponding	Severe: ponding	Poor: ponding
64B:					
Stockbridge-----	Severe: percs slowly	Moderate: slope	Slight	Slight	Fair: small stones
64C:					
Stockbridge-----	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Fair: slope small stones
64D:					
Stockbridge-----	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
65C: Stockbridge-----	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Fair: slope small stones
65D: Stockbridge-----	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope
66A: Georgia---------	Severe: percs slowly wetness	Slight	Severe: wetness	Moderate: wetness	Fair: small stones
66B: Georgia---------	Severe: percs slowly wetness	Moderate: slope	Severe: wetness	Moderate: wetness	Fair: small stones
66C: Georgia---------	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Fair: small stones
66D: Georgia---------	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope
67B: Georgia---------	Severe: percs slowly wetness	Moderate: slope	Severe: wetness	Moderate: wetness	Poor: small stones
67C: Georgia---------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Poor: small stones
68A,68B: Massena---------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
69A,69B:					
Massena----------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
70A,70B:					
Groton-----------	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
70C:					
Groton-----------	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
70D,70E:					
Groton-----------	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage slope too sandy
71A,71B:					
Hero-------------	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage small stones too sandy
72A:					
Fredon-----------	Severe: wetness poor filter	Severe: flooding seepage	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage small stones too sandy
84B:					
Nellis-----------	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Poor: small stones
84C:					
Nellis-----------	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Poor: small stones
84D:					
Nellis-----------	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
85B: Nellis----------	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Poor: small stones
85C: Nellis----------	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Poor: small stones
85D,85E: Nellis----------	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
86A: Amenia----------	Severe: percs slowly wetness	Moderate: seepage	Severe: wetness	Moderate: wetness	Fair: small stones wetness
86B: Amenia----------	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
86C: Amenia----------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
87B: Amenia----------	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
87C: Amenia----------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
90C: Berkshire-------	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
90E:					
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
93B:					
Pittsfield------	Slight	Severe: seepage	Severe: seepage	Severe: seepage	Fair: small stones
93C:					
Pittsfield------	Moderate: slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
93D:					
Pittsfield------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
94B:					
Pittsfield------	Slight	Severe: seepage	Severe: seepage	Severe: seepage	Fair: small stones
94C:					
Pittsfield------	Moderate: slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
94D,94E:					
Pittsfield------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
95C:					
Houghtonville---	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
95D,95E:					
Houghtonville---	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
96D,96F:					
Hogback---------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Rock outcrop----	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
100B:					
Wilmington------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
102B:					
Mundal----------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Poor: small stones
102C:					
Mundal----------	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
104B:					
Colton----------	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
104C:					
Colton----------	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
104E:					
Colton----------	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
105B:					
Monadnock-------	Slight	Severe: seepage	Severe: seepage	Severe: seepage	Poor: seepage
105C:					
Monadnock-------	Moderate: slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Poor: seepage
105D,105E:					
Monadnock-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: seepage slope
106B:					
Berkshire-------	Moderate: percs slowly	Severe: seepage	Severe: seepage	Severe: seepage	Fair: small stones
106C:					
Berkshire-------	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
106D,106E:					
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
108B:					
Peru------------	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
108C:					
Peru------------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
108D:					
Peru------------	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
109C:					
Tunbridge-------	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim
Berkshire-------	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
109D,109E:					
Tunbridge-------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
111C:					
Rawsonville-----	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim small stones
Houghtonville---	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
111D,111E:					
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Houghtonville---	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
112C:					
Rawsonville-----	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim small stones
Hogback---------	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
112D,112E:					
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Hogback---------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
113B:					
Cabot-----------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
114B:					
Mundal----------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Poor: small stones
114C:					
Mundal----------	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
114D:					
Mundal----------	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope small stones
115B:					
Peru------------	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
115C:					
Peru------------	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
115D:					
Peru------------	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope
116D,116F:					
Lyman-----------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Poor: slope depth to rock
Tunbridge-------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Rock outcrop----	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
117B:					
Berkshire-------	Moderate: percs slowly	Severe: seepage	Severe: seepage	Severe: seepage	Poor: small stones
117C:					
Berkshire-------	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Poor: small stones
117D:					
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope small stones
118C:					
Tunbridge-------	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim
Lyman-----------	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: seepage depth to rock	Poor: depth to rock

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
118D,118E:					
Tunbridge-------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Lyman-----------	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Poor: slope depth to rock
221F:					
Tunbridge-------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
403B:					
Cabot-----------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
Carlisle--------	Severe: percs slowly subsides ponding	Severe: excess humus seepage ponding	Severe: excess humus seepage ponding	Severe: seepage ponding	Poor: excess humus ponding
405D:					
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
Tunbridge-------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
413D:					
Peru------------	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
413D:					
Berkshire-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
Cabot-----------	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Poor: slope wetness
702E:					
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Hogback---------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
703C:					
Mundal----------	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
Houghtonville---	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
705D:					
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Houghtonville---	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
Mundal----------	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope small stones

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
715D:					
Houghtonville---	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
902F:					
Hogback---------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Rawsonville-----	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope small stones
Rock outcrop----	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
903C:					
Mundal----------	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
Wilmington------	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
905D:					
Houghtonville---	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
Monadnock-------	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: seepage slope
913E:					
Glebe-----------	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope

Table 11.—Sanitary Facilities—Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
913E:					
Stratton	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim seepage small stones
923B:					
Wilmington	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Mundal	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Poor: small stones

Table 12.—Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
3A:				
Copake	Good	Probable	Probable	Poor: area reclaim small stones
3B:				
Copake	Good	Probable	Probable	Poor: area reclaim small stones
3C:				
Copake	Good	Probable	Probable	Poor: area reclaim small stones
3D:				
Copake	Fair: slope	Probable	Probable	Poor: area reclaim slope small stones
3E:				
Copake	Poor: slope	Probable	Probable	Poor: area reclaim slope small stones
9:				
Pits	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: depth to rock
Dumps	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
10D:				
Glebe	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Stratton	Poor: area reclaim large stones	Improbable: large stones small stones	Improbable: large stones	Poor: area reclaim large stones slope
Londonderry	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope
10E:				
Glebe	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Stratton	Poor: area reclaim large stones slope	Improbable: large stones small stones	Improbable: large stones	Poor: area reclaim large stones slope

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
Londonderry-------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope
11F:				
Taconic-----------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Hubbardton--------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim large stones slope
Rock Outcrop------------	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
18B:				
Windsor-----------------	Good	Probable	Improbable: too sandy	Poor: too sandy
18C:				
Windsor-----------------	Good	Probable	Improbable: too sandy	Poor: too sandy
18E:				
Windsor-----------------	Poor: slope	Probable	Improbable: too sandy	Poor: slope too sandy
21A:				
Limerick----------------	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
23A:				
Adrian------------------	Poor: wetness	Probable	Improbable: too sandy	Poor: excess humus wetness
Saco--------------------	Poor: wetness	Probable	Improbable: too sandy	Poor: wetness
24A:				
Carlisle----------------	Poor: low strength wetness	Improbable: excess humus	Improbable: excess humus	Poor: excess humus wetness
25B:				
Belgrade----------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Fair: area reclaim too sandy
26A:				
Raynham-----------------	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
27B:				
Udipsamments------------	---	---	---	---
Udorthents--------------	---	---	---	---

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
28A:				
Udifluvents	---	---	---	---
29A:				
Occum	Good	Probable	Improbable: too sandy	Fair: area reclaim thin layer
34A:				
Pootatuck	Fair: wetness	Probable	Improbable: too sandy	Fair: thin layer
35B:				
Hartland	Fair: low strength	Improbable: excess fines	Improbable: excess fines	Good
40B:				
Galway	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Farmington	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
40C:				
Galway	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Farmington	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
40D:				
Galway	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Nellis	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Farmington	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
41C:				
Galway	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Farmington	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
41D:				
Galway	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Farmington	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
41E:				
Galway	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Farmington	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
42C:				
Macomber	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Taconic	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
42D:				
Macomber	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Taconic	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
42E:				
Macomber	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Taconic	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
43C:				
Taconic	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Macomber	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
43D:				
Taconic	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
43D:				
Macomber----------------	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
43E:				
Taconic-----------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Macomber----------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
44B:				
Dutchess----------------	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
44C:				
Dutchess----------------	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
44D:				
Dutchess----------------	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
47C:				
Dutchess----------------	Fair: large stones	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
47D:				
Dutchess----------------	Fair: large stones slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
47E:				
Dutchess----------------	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
48B:				
Pittstown---------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
48C:				
Pittstown---------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
48D:				
Pittstown---------------	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
49C:				
Pittstown	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
49D:				
Pittstown	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
50B:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
51B:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
52A:				
Mansfield	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim wetness
64B:				
Stockbridge	Good	Improbable: excess fines	Improbable: excess fines	Fair: small stones
64C:				
Stockbridge	Good	Improbable: excess fines	Improbable: excess fines	Fair: slope small stones
64D:				
Stockbridge	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope
65C:				
Stockbridge	Good	Improbable: excess fines	Improbable: excess fines	Fair: slope small stones
65D:				
Stockbridge	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope
66A:				
Georgia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
66B:				
Georgia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
66C:				
Georgia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
66D:				
Georgia	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
67B:				
Georgia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
67C:				
Georgia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
68A:				
Massena	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
68B:				
Massena	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
69A:				
Massena	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
69B:				
Massena	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
70A:				
Groton	Good	Probable	Probable	Poor: area reclaim small stones
70B:				
Groton	Good	Probable	Probable	Poor: area reclaim small stones
70C:				
Groton	Good	Probable	Probable	Poor: area reclaim small stones
70D:				
Groton	Fair: slope	Probable	Probable	Poor: area reclaim slope small stones
70E:				
Groton	Poor: slope	Probable	Probable	Poor: area reclaim slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
71A:				
Hero	Fair: wetness	Probable	Probable	Poor: area reclaim small stones
71B:				
Hero	Fair: wetness	Probable	Probable	Poor: area reclaim small stones
72A:				
Fredon	Poor: wetness	Probable	Probable	Poor: area reclaim small stones wetness
84B:				
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
84C:				
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
84D:				
Nellis	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
85B:				
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
85C:				
Nellis	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
85D:				
Nellis	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
85E:				
Nellis	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
86A:				
Amenia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
86B:				
Amenia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
86C:				
Amenia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
87B:				
Amenia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
87C:				
Amenia	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
90C:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
90E:				
Berkshire	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
93B:				
Pittsfield	Fair: low strength	Improbable: excess fines	Improbable: excess fines	Poor: small stones
93C:				
Pittsfield	Fair: low strength	Improbable: excess fines	Improbable: excess fines	Poor: small stones
93D:				
Pittsfield	Fair: low strength slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
94B:				
Pittsfield	Fair: low strength	Improbable: excess fines	Improbable: excess fines	Poor: small stones
94C:				
Pittsfield	Fair: low strength	Improbable: excess fines	Improbable: excess fines	Poor: small stones
94D:				
Pittsfield	Fair: low strength slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
94E:				
Pittsfield	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
95C:				
Houghtonville	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
95D:				
Houghtonville	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
95E:				
Houghtonville	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
96D:				
Hogback	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rock Outcrop	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
96F:				
Hogback	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Rawsonville	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rock Outcrop	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
100B:				
Wilmington	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
102B:				
Mundal	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
102C:				
Mundal	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
104B:				
Colton	Fair: large stones	Probable	Probable	Poor: area reclaim small stones
104C:				
Colton	Fair: large stones	Probable	Probable	Poor: area reclaim small stones
104E:				
Colton	Poor: slope	Probable	Probable	Poor: area reclaim slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
105B:				
Monadnock	Good	Probable	Improbable: too sandy	Poor: small stones
105C:				
Monadnock	Good	Probable	Improbable: too sandy	Poor: small stones
105D:				
Monadnock	Fair: slope	Probable	Improbable: too sandy	Poor: slope small stones
105E:				
Monadnock	Poor: slope	Probable	Improbable: too sandy	Poor: slope small stones
106B:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
106C:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
106D:				
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
106E:				
Berkshire	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
108B:				
Peru	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
108C:				
Peru	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
108D:				
Peru	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
109C:				
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
109D:				
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
109E:				
Tunbridge	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Berkshire	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
111C:				
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Houghtonville	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
111D:				
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Houghtonville	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
111E:				
Rawsonville	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Houghtonville	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
112C:				
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Hogback	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
112D:				
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Hogback	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
112E:				
Rawsonville	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Hogback	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
113B:				
Cabot-------------------	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim large stones wetness
114B:				
Mundal------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
114C:				
Mundal------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
114D:				
Mundal------------------	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
115B:				
Peru--------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
115C:				
Peru--------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
115D:				
Peru--------------------	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
116D:				
Lyman-------------------	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
Tunbridge---------------	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rock Outcrop------------	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
116F:				
Lyman-------------------	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
Tunbridge---------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rock Outcrop------------	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
117B:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
117C:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
117D:				
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
118C:				
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
118D:				
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
118E:				
Tunbridge	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Lyman	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
221F:				
Tunbridge	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Berkshire	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
403B:				
Cabot	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim large stones wetness
Carlisle	Poor: low strength wetness	Improbable: excess humus	Improbable: excess humus	Poor: excess humus wetness

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
405D:				
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
413D:				
Peru	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Cabot	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim large stones wetness
702E:				
Rawsonville	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Hogback	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
703C:				
Mundal	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Houghtonville	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
705D:				
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Houghtonville	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Mundal	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
715D:				
Houghtonville	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rawsonville	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones

Table 12.—Construction Materials—Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
902F:				
Hogback-----------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Rawsonville-------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Rock Outcrop------------	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
903C:				
Mundal------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Wilmington--------------	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
905D:				
Houghtonville-----------	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Monadnock---------------	Fair: slope	Probable	Improbable: too sandy	Poor: slope small stones
913E:				
Glebe-------------------	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Stratton----------------	Poor: area reclaim large stones slope	Improbable: large stones small stones	Improbable: large stones	Poor: area reclaim large stones slope
923B:				
Wilmington--------------	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Mundal------------------	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones

Table 13.—Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

	Limitations for--			Features affecting--			
Map symbol and soil name	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
3A:							
Copake	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Favorable	Limitation: too sandy	Favorable
3B:							
Copake	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: too sandy	Favorable
3C:							
Copake	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
3D:							
Copake	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
3E:							
Copake	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
9:							
Pits	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Dumps	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
10D:							
Glebe	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope
Stratton	Severe: slope depth to rock	Severe: large stones seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
10D:							
Londonderry	Severe: slope depth to rock	Severe: thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
10E:							
Glebe	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope
Stratton	Severe: slope depth to rock	Severe: large stones seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
Londonderry	Severe: slope depth to rock	Severe: thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
11F:							
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Hubbardton	Severe: slope depth to rock	Severe: large stones	Severe: no water	Limitation: deep to water	Limitation: large stones depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope
Rock Outcrop	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
18B:							
Windsor	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy	Limitation: droughty
18C:							
Windsor	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy	Limitation: slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
18E:							
Windsor	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy	Limitation: slope droughty
21A:							
Limerick	Moderate: seepage	Severe: piping wetness	Moderate: slow refill	Limitation: flooding frost action	Limitation: erodes easily flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
23A:							
Adrian	Severe: seepage	Severe: seepage piping ponding	Severe: slow refill cutbanks cave	Limitation: frost action subsides ponding	Limitation: rooting depth soil blowing ponding	Limitation: too sandy soil blowing ponding	Limitation: rooting depth wetness
Saco	Moderate: seepage	Severe: piping wetness	Severe: cutbanks cave	Limitation: flooding frost action poor outlets	Limitation: flooding wetness	Limitation: poor outlets wetness	Limitation: wetness
24A:							
Carlisle	Severe: seepage	Severe: excess humus ponding	Severe: slow refill	Limitation: frost action subsides ponding	Limitation: soil blowing ponding	Limitation: soil blowing ponding	Limitation: wetness
25B:							
Belgrade	Severe: seepage	Severe: piping wetness	Severe: slow refill cutbanks cave	Limitation: frost action slope cutbanks cave	Limitation: percs slowly slope wetness	Limitation: erodes easily wetness	Limitation: erodes easily
26A:							
Raynham	Moderate: seepage	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
27B:							
Udipsamments	---	---	---	---	---	---	---
Udorthents	---	---	---	---	---	---	---

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
28A:							
Udifluvents	---	---	---	---	---	---	---
29A:							
Occum	Severe: seepage	Severe: seepage piping	Severe: cutbanks cave	Limitation: deep to water	Limitation: flooding	Limitation: too sandy	Favorable
34A:							
Pootatuck	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: flooding cutbanks cave	Limitation: flooding wetness	Limitation: too sandy wetness	Favorable
35B:							
Hartland	Moderate: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily	Limitation: erodes easily	Limitation: erodes easily
40B:							
Galway	Moderate: seepage slope depth to rock	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock droughty
Nellis	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Favorable	Limitation: rooting depth droughty
Farmington	Severe: depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: depth to rock	Limitation: depth to rock droughty
40C:							
Galway	Severe: slope	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
40C:							
Farmington	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
40D:							
Galway	Severe: slope	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
Farmington	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
41C:							
Galway	Severe: slope	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock depth to rock	Limitation: slope depth to rock droughty
Farmington	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
41D:							
Galway	Severe: slope	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Farmington	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
41E:							
Galway	Severe: slope	Severe: piping	Severe: no water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Farmington	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
42C:							
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
42D:							
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
42E:							
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
43C:							
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
43D:							
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
43E:							
Taconic	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Macomber	Severe: slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
44B:							
Dutchess	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: erodes easily large stones	Limitation: erodes easily large stones
44C:							
Dutchess	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
44D: Dutchess	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
47C: Dutchess	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
47D: Dutchess	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
47E: Dutchess	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
48B: Pittstown	Moderate: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth wetness
48C: Pittstown	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
48D: Pittstown	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
49C: Pittstown	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: large stones percs slowly slope	Limitation: large stones rooting depth slope
49D: Pittstown	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: large stones percs slowly slope	Limitation: large stones rooting depth slope
50B: Brayton	Moderate: seepage	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly	Limitation: wetness	Limitation: percs slowly wetness	Limitation: wetness
51B: Brayton	Moderate: seepage	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly	Limitation: wetness droughty	Limitation: percs slowly wetness	Limitation: wetness
52A: Mansfield	Slight	Severe: piping ponding	Severe: no water	Limitation: frost action percs slowly ponding	Limitation: percs slowly rooting depth ponding	Limitation: percs slowly rooting depth ponding	Limitation: percs slowly rooting depth wetness
64B: Stockbridge	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly slope	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
64C: Stockbridge	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly slope	Limitation: erodes easily percs slowly slope	Limitation: erodes easily percs slowly slope
64D: Stockbridge	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly slope	Limitation: erodes easily percs slowly slope	Limitation: erodes easily percs slowly slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
65C:							
Stockbridge	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly slope	Limitation: erodes easily percs slowly slope	Limitation: erodes easily percs slowly slope
65D:							
Stockbridge	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly slope	Limitation: erodes easily percs slowly slope	Limitation: erodes easily percs slowly slope
66A:							
Georgia	Moderate: seepage	Severe: piping	Severe: no water	Limitation: frost action percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily large stones	Limitation: erodes easily large stones
66B:							
Georgia	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones	Limitation: erodes easily large stones
66C:							
Georgia	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
66D:							
Georgia	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
67B:							
Georgia	Moderate: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: large stones wetness	Limitation: large stones percs slowly

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
67C:							
Georgia----------------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: large stones slope wetness	Limitation: large stones percs slowly slope
68A:							
Massena----------------	Slight	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly	Limitation: wetness droughty	Limitation: wetness	Limitation: wetness droughty
68B:							
Massena----------------	Moderate: slope	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: wetness	Limitation: wetness droughty
69A:							
Massena----------------	Slight	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly	Limitation: wetness droughty	Limitation: percs slowly wetness	Limitation: wetness droughty
69B:							
Massena----------------	Moderate: slope	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly wetness	Limitation: wetness droughty
70A:							
Groton-----------------	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: too sandy	Limitation: droughty
70B:							
Groton-----------------	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: too sandy	Limitation: droughty
70C:							
Groton-----------------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: slope too sandy	Limitation: slope droughty
70D:							
Groton-----------------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: slope too sandy	Limitation: slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
70E:							
Groton	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: slope too sandy	Limitation: slope droughty
71A:							
Hero	Severe: seepage	Severe: seepage wetness	Severe: cutbanks cave	Limitation: frost action cutbanks cave	Limitation: wetness	Limitation: too sandy wetness	Favorable
71B:							
Hero	Severe: seepage	Severe: seepage wetness	Severe: cutbanks cave	Limitation: frost action slope cutbanks cave	Limitation: slope wetness	Limitation: too sandy wetness	Favorable
72A:							
Fredon	Severe: seepage	Severe: seepage wetness	Severe: cutbanks cave	Limitation: frost action	Limitation: wetness	Limitation: too sandy wetness soil blowing	Limitation: wetness
84B:							
Nellis	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Favorable	Limitation: rooting depth droughty
84C:							
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
84D:							
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
85B:							
Nellis	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Favorable	Limitation: rooting depth droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
85C:							
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
85D:							
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
85E:							
Nellis	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: rooting depth slope droughty	Limitation: slope	Limitation: rooting depth slope droughty
86A:							
Amenia	Moderate: seepage	Moderate: seepage piping wetness	Severe: no water	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: percs slowly wetness	Limitation: percs slowly
86B:							
Amenia	Moderate: seepage slope	Moderate: seepage piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly
86C:							
Amenia	Severe: slope	Moderate: seepage piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly slope
87B:							
Amenia	Moderate: seepage slope	Moderate: seepage piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
87C:							
Amenia	Severe: slope	Moderate: seepage piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly slope
90C:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
90E:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
93B:							
Pittsfield	Severe: seepage	Moderate: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Favorable	Favorable
93C:							
Pittsfield	Severe: seepage slope	Moderate: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
93D:							
Pittsfield	Severe: seepage slope	Moderate: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
94B:							
Pittsfield	Severe: seepage	Moderate: large stones seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: large stones	Limitation: large stones
94C:							
Pittsfield	Severe: seepage slope	Moderate: large stones seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: large stones slope	Limitation: large stones slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
94D:							
Pittsfield	Severe: seepage, slope	Moderate: large stones, seepage, piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: large stones, slope	Limitation: large stones, slope
94E:							
Pittsfield	Severe: seepage, slope	Moderate: large stones, seepage, piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: large stones, slope	Limitation: large stones, slope
95C:							
Houghtonville	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, rooting depth, slope	Limitation: erodes easily, slope	Limitation: erodes easily, rooting depth, slope
95D:							
Houghtonville	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, rooting depth, slope	Limitation: erodes easily, slope	Limitation: erodes easily, rooting depth, slope
95E:							
Houghtonville	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, rooting depth, slope	Limitation: erodes easily, slope	Limitation: erodes easily, rooting depth, slope
96D:							
Hogback	Severe: slope, depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope, depth to rock	Limitation: large stones, slope, depth to rock	Limitation: erodes easily, large stones, slope
Rawsonville	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, slope, depth to rock	Limitation: erodes easily, slope, depth to rock	Limitation: erodes easily, slope, depth to rock
Rock Outcrop	Severe: slope, depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope, depth to rock	Limitation: slope, depth to rock	Limitation: slope, depth to rock

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
96F:							
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Rock Outcrop	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
100B:							
Wilmington	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones	Limitation: large stones wetness
102B:							
Mundal	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones	Limitation: erodes easily rooting depth
102C:							
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily rooting depth slope
104B:							
Colton	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: fast intake large stones droughty	Limitation: large stones too sandy	Limitation: large stones droughty
104C:							
Colton	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: fast intake large stones droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
104E:							
Colton	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: fast intake large stones droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
105B:							
Monadnock	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: too sandy	Favorable
105C:							
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
105D:							
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
105E:							
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
106B:							
Berkshire	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones	Limitation: large stones droughty
106C:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
106D:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
106E:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
108B:							
Peru	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth
108C:							
Peru	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
108D:							
Peru	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
109C:							
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
109D:							
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
109E:							
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
111C:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
111D:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
111E:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
112C:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
112D:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
112E:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
113B:							
Cabot	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action large stones percs slowly	Limitation: large stones percs slowly wetness	Limitation: large stones rooting depth wetness	Limitation: large stones rooting depth wetness
114B:							
Mundal	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones	Limitation: erodes easily large stones

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
114C:							
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
114D:							
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
115B:							
Peru	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: wetness soil blowing	Limitation: percs slowly rooting depth
115C:							
Peru	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness soil blowing	Limitation: percs slowly rooting depth slope
115D:							
Peru	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness soil blowing	Limitation: percs slowly rooting depth slope
116D:							
Lyman	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Rock Outcrop	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
116F:							
Lyman	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Rock Outcrop	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
117B:							
Berkshire	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing	Limitation: large stones soil blowing	Limitation: large stones
117C:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing	Limitation: large stones slope soil blowing	Limitation: large stones slope
117D:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing	Limitation: large stones slope soil blowing	Limitation: large stones slope
118C:							
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Lyman	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
118D:							
Tunbridge-------------	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Lyman-----------------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
118E:							
Tunbridge-------------	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Lyman-----------------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
221F:							
Tunbridge-------------	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Berkshire-------------	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
403B:							
Cabot-----------------	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action large stones percs slowly	Limitation: large stones percs slowly wetness	Limitation: large stones rooting depth wetness	Limitation: large stones rooting depth wetness
Carlisle--------------	Severe: seepage	Severe: excess humus ponding	Severe: slow refill	Limitation: frost action subsides ponding	Limitation: soil blowing ponding	Limitation: soil blowing ponding	Limitation: wetness

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
405D:							
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
Tunbridge	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
413D:							
Peru	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
Cabot	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action large stones percs slowly	Limitation: large stones percs slowly wetness	Limitation: large stones slope wetness	Limitation: large stones slope wetness
702E:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
703C:							
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
703C:							
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
705D:							
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
715D:							
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
902F:							
Hogback	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
Rawsonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Rock Outcrop	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock

Table 13.—Water Management—Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
903C:							
Mundal	Severe: slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones slope	Limitation: erodes easily large stones slope
Wilmington	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones	Limitation: large stones wetness
905D:							
Houghtonville	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily rooting depth slope	Limitation: erodes easily slope	Limitation: erodes easily rooting depth slope
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
913E:							
Glebe	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope
Stratton	Severe: slope depth to rock	Severe: large stones seepage piping	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock	Limitation: erodes easily large stones slope
923B:							
Wilmington	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily large stones	Limitation: large stones wetness
Mundal	Moderate: seepage slope	Severe: seepage piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly rooting depth wetness	Limitation: erodes easily large stones	Limitation: erodes easily large stones

Table 14.—Engineering Index Properties

(Absence of an entry indicates that the data were not estimated. An * indicates that a USDA texture always has a textural modifier)

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
3A,3B,3C,3D,3E:												
Copake----------	0-6	sil, l, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0	0-3	68-91	52-91	42-90	20-55	0-25	NP-4
	6-22	sil, l, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0	0-7	68-91	52-91	40-90	20-55	0-25	NP-4
	22-65	lfs, s, cos (gr-grv)	SM, SW, SW-SM	A-1-b, A-1-a	0	0-10	55-85	19-82	10-45	2-15	0-14	NP
9:												
Pits------------	0-65	uwb (none)			---	---	---	---	---	---	---	---
Dumps-----------	0-65	var (none)			---	---	---	---	---	---	0-14	---
10D,10E:												
Glebe-----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-85	25-50	---	---
	3-11	sil, vfsl, fsl (gr)	ML, SM	A-2-4, A-4	1-5	0-5	75-100	52-92	50-85	25-50	10-40	NP-10
	11-28	sil, vfsl, fsl, sl, ls (gr)	GM, ML, SM	A-2-4, A-1-b, A-4	0-5	0-5	65-95	52-92	25-85	15-50	10-40	NP-10
	28-32	uwb (none)			---	---	---	---	---	---	---	---
Stratton--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	17-60	13-55	---	---
	1-7	sil, l, fsl (cn-cnv-gr-grv) *	ML, SM	A-2-4, A-2-5, A-4, A-5	1-5	5-20	60-90	30-63	17-60	13-55	20-50	NP-10
	7-15	sil, l, fsl (cn-cnv-gr-grv) *	GM, GP, SM	A-2-4, A-1-a, A-1-b, A-5	0-20	0-60	30-80	28-49	0-47	0-40	20-50	NP-10
	15-20	sil, l, fsl (cn-cnv-gr-grv) *	GM, GP, SM	A-1-a, A-1-b, A-2-4, A-4, A-5	5-20	15-60	35-80	33-60	0-50	0-45	20-50	NP-10
	20-24	uwb (none)			---	---	---	---	---	---	---	---
Londonderry-----	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-90	25-70	---	---
	1-4	sil, fsl, sl (gr)	CL, CL-ML, ML, SM	A-2-4, A-4	0-1	0-10	80-100	69-99	40-90	25-70	15-30	NP-10
	4-6	sil, fsl, sl (gr)	CL, CL-ML, ML, SM	A-2-4, A-4	0-2	0-10	80-100	69-99	40-90	25-51	15-30	NP-10
	6-10	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
11F:												
Taconic---------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	26-80	21-74	---	---
	1-3	sil, l (cn-cnv)	CL, CL-ML, ML, SM	A-2-4, A-4, A-6	1-5	5-40	65-85	53-85	26-80	21-74	15-35	3-15
	3-13	sil, l (cn-cnv) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	29-55	19-55	15-50	15-30	3-15
	13-17	uwb (none)			---	---	---	---	---	---	---	---
Hubbardton------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	20-70	10-50	---	---
	2-4	sil, fsl (cn-cnv-fl-flv) *	GM, SC-SM, SM	A-1-a, A-2-4, A-4	0-1	15-55	60-95	31-76	20-70	10-50	25-37	4-10
	4-8	sil, fsl (cn-cnv-fl-flv) *	GM, SC-SM, SM	A-1-a, A-2-4, A-4	0-5	15-55	60-90	31-76	20-70	10-50	25-35	4-10
	8-12	uwb (none)			---	---	---	---	---	---	---	---
Rock Outcrop----	0-65	uwb (none)			---	---	---	---	---	---	---	---
18B,18C,18E:												
Windsor---------	0-4	lfs, ls (none)	SM	A-1-b, A-2-4	0	0	95-100	84-100	50-95	20-35	0-14	NP
	4-22	lfs, ls (none)	SM	A-1-b, A-2-4	0	0	95-100	84-100	50-95	24-34	0-14	NP
	22-65	lfs, ls, fs, s (none)	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0	90-100	76-100	50-95	2-15	0-14	NP
21A:												
Limerick--------	0-6	sil, vfsl (none)	ML	A-4	0	0	100	92-100	87-100	75-89	0-14	NP
	6-11	sil, vfsl (none)	ML	A-4	0	0	100	92-100	87-100	75-89	0-14	NP
	11-65	sil, vfsl (none)	ML	A-4	0	0	100	92-100	87-100	75-89	0-14	NP
23A:												
Adrian----------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	100	100	---	---	---	---
	2-35	peat, mpt, muck (none)	PT	A-8	0	0	100	100	---	---	---	---
	35-65	ls, s (gr)	SM	A-1-b, A-2-4	0	0	80-100	62-100	40-80	15-35	0-14	NP

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
23A:												
Saco------------	0-7	sil, vfsl (mk)	CL-ML, ML	A-4	0	0	100	92-100	84-100	73-92	0-40	NP-10
	7-22	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	84-100	72-93	0-40	NP-10
	22-41	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	84-100	49-68	0-40	NP-10
	41-65	lfs, ls, lcos, fs, s, cos (gr-grv)	SM, SP, SP-SM	A-1-a, A-1-b, A-2-4	0	0	80-100	45-100	20-52	3-15	0-14	NP
24A:												
Carlisle--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	100	100	---	---	---	---
	1-65	mpt, muck (none)	PT	A-8	0	0	100	100	---	---	---	---
25B:												
Belgrade--------	0-9	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	85-100	70-95	0-35	NP-8
	9-21	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	85-100	70-95	0-35	NP-8
	21-65	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	85-100	70-95	0-35	NP-8
26A:												
Raynham---------	0-8	sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	96-100	89-100	77-93	0-25	NP-5
	8-16	si, sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	96-100	89-100	77-93	0-25	NP-5
	16-65	si, sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	96-100	90-100	86-100	0-25	NP-5
27B:												
Udipsamments----	0-65	s (none)	SP, SP-SM	A-1-a, A-3, A-1-b	---	0-2	60-100	18-100	14-75	1-7	0-14	NP
Udorthents------	0-65	sl (gr)	GM, GW, SP-SM, SM	A-1-a, A-2-4, A-3, A-4	---	0-30	50-100	18-100	10-85	2-46	0-35	NP-10
28A:												
Udifluvents-----	0-6	s (none)			---	---	---	---	---	---	---	---
	6-65	s (cbv)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
29A:												
Occum-----------	0-10	vfsl, fsl (none)	SM	A-4, A-2-4	0	0	95-100	76-100	60-96	25-50	0-25	NP-4
	10-36	l, vfsl, fsl (none)	SC-SM, SM	A-2-4, A-4	0	0	95-100	76-100	60-96	25-50	0-25	NP-4
	36-65	lfs, ls, lcos, fs, s, cos (gr-grv)	SM, SP, SP-SM	A-1-b, A-1-a, A-4, A-2-4	0	0-10	65-100	36-100	20-97	4-36	0-14	NP
34A:												
Pootatuck-------	0-10	vfsl, fsl, sl (none)	SM	A-2-4, A-4	0	0	95-100	78-100	64-91	34-50	0-25	NP-3
	10-33	sil, l, vfsl, fsl, sl (none)	SM, ML	A-2-4, A-4	0	0	95-100	78-100	65-93	34-52	0-20	NP-2
	33-65	lfs, fs, s, cos (gr-grv)	SM, SP, SP-SM	A-2-4, A-1-b, A-1-a	0	0-15	70-100	45-100	30-96	4-34	0-14	NP
35B:												
Hartland--------	0-9	si, sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	86-100	75-89	0-25	NP-5
	9-18	si, sil, vfsl (none)	CL-ML, ML	A-4	0	0	100	92-100	86-100	75-89	0-25	NP-5
	18-65	si, sil, vfsl, lvfs, vfs (none)	CL-ML, ML	A-4	0	0	100	92-100	80-100	65-95	0-25	NP-5
40B,40C:												
Galway----------	0-2	sil, l (gr)	ML, SM	A-4, A-6, A-7-5	0-1	0-10	80-95	52-95	45-90	36-75	35-45	5-15
	2-19	sil, l, fsl (gr)	CL, ML, SM	A-1-b, A-2-4, A-4, A-6	0-5	0-10	80-95	52-95	44-88	25-64	20-40	3-15
	19-30	sil, fsl (gr-grv)	GP-GM, ML, SM	A-1-a, A-2-4, A-3, A-4	0-1	0-5	50-90	36-84	13-80	10-73	0-20	NP-3
	30-34	uwb (none)			---	---	---	---	---	---	---	---
Nellis----------	0-8	sil, fsl (gr)	ML, SM	A-2-4, A-4	0	0-5	75-100	52-92	45-90	35-76	30-35	1-5
	8-23	sil, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	22-76	20-25	1-5
	23-31	l, fsl (gr-grv)	SC-SM, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	12-50	20-25	1-5
	31-65	l, fsl (gr-grv)	CL-ML, SM, SP-SM	A-1-a, A-1-b, A-2-4, A-4	0-1	0-5	60-95	35-92	18-92	8-52	0-25	NP-5

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
40B,40C:												
Farmington------	0-2	sil, l, fsl (gr)	CL, ML, SC, SM	A-2-4, A-4, A-6	0	0-5	80-95	52-91	48-85	35-80	20-35	3-15
	2-18	sil, l, fsl (gr)	CL, GM, ML, SC	A-1-b, A-2-4, A-4, A-6	0	0-5	60-95	52-91	29-85	20-68	20-35	3-15
	18-22	uwb (none)			---	---	---	---	---	---	---	---
40D:												
Galway----------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	36-75	---	---
	2-4	sil, l (gr)	ML, SM	A-4, A-6, A-7-5	0-1	0-10	80-95	52-95	45-90	36-75	35-45	5-15
	4-21	sil, l, fsl (gr)	CL, ML, SM	A-1-b, A-2-4, A-4, A-6	0-5	0-10	80-95	52-95	44-88	25-64	20-40	3-15
	21-32	sil, fsl (gr-grv)	GP-GM, ML, SM	A-1-a, A-2-4, A-3, A-4	0-1	0-5	50-90	36-84	13-80	10-73	0-20	NP-3
	32-36	uwb (none)			---	---	---	---	---	---	---	---
Nellis----------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	35-76	---	---
	1-8	sil, fsl (gr)	ML, SM	A-2-4, A-4	0	0-5	75-100	52-92	45-90	35-76	30-35	1-5
	8-23	sil, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	22-76	20-25	1-5
	23-31	l, fsl (gr-grv)	SC-SM, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	12-50	20-25	1-5
	31-65	l, fsl (gr-grv)	CL-ML, SM, SP-SM	A-1-a, A-1-b, A-2-4, A-4	0-1	0-5	60-95	35-92	18-92	8-52	0-25	NP-5
Farmington------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	48-85	35-80	---	---
	3-5	sil, l, fsl (gr)	CL, ML, SC, SM	A-2-4, A-4, A-6	0	0-5	80-95	52-91	48-85	35-80	20-35	3-15
	5-21	sil, l, fsl (gr)	CL, GM, ML, SC	A-1-b, A-2-4, A-4, A-6	0	0-5	60-95	52-91	29-85	20-68	20-35	3-15
	21-25	uwb (none)			---	---	---	---	---	---	---	---
41C,41D,41E:												
Galway----------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	36-75	---	---
	2-4	sil, l (gr)	ML, SM	A-4, A-6, A-7-5	0-1	0-10	80-95	52-95	45-90	36-75	35-45	5-15
	4-21	sil, l, fsl (gr)	CL, ML, SM	A-1-b, A-2-4, A-4, A-6	0-5	0-10	80-95	52-95	44-88	25-64	20-40	3-15
	21-32	sil, fsl (gr-grv)	GP-GM, ML, SM	A-1-a, A-2-4, A-3, A-4	0	0-5	50-90	36-84	13-80	10-73	0-20	NP-3
	32-36	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
41C,41D,41E:												
Farmington------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	48-85	35-80	---	---
	3-5	sil, l, fsl (gr)	CL, ML, SC, SM	A-2-4, A-4, A-6	0-1	0-5	80-95	52-91	48-85	35-80	20-35	3-15
	5-21	sil, l, fsl (gr)	CL, GM, ML, SC	A-1-b, A-2-4, A-4, A-6	0	0-5	60-95	52-91	29-85	20-68	20-35	3-15
	21-25	uwb (none)			---	---	---	---	---	---	---	---
42C:												
Macomber--------	0-2	sil, l (cn-cnv)	CL, ML, SC-SM, SM	A-2-4, A-4, A-6	0-1	0-15	55-85	51-82	31-80	25-75	15-35	3-15
	2-36	sil, l (cn-cnv-cnx) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	24-56	20-52	15-48	15-30	3-15
	36-40	uwb (none)			---	---	---	---	---	---	---	---
Taconic---------	0-2	sil, l (cn-cnv)	CL, GM, ML, SM	A-1-b, A-4, A-6	0-1	5-40	65-85	53-85	26-75	21-74	15-35	3-15
	2-12	sil, l (cn-cnv) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	29-55	19-55	15-50	15-35	3-15
	12-16	uwb (none)			---	---	---	---	---	---	---	---
42D,42E:												
Macomber--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	31-80	25-75	---	---
	1-3	sil, l (cn-cnv)	CL, ML, SC-SM, SM	A-2-4, A-4, A-6	1-5	5-30	55-85	51-82	31-80	25-75	15-35	3-15
	3-37	sil, l (cn-cnv-cnx) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	24-56	20-52	15-48	15-35	3-15
	37-41	uwb (none)			---	---	---	---	---	---	---	---
Taconic---------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	26-80	21-74	---	---
	1-3	sil, l (cn-cnv)	CL, CL-ML, ML, SM	A-2-4, A-4, A-6	1-5	5-40	65-85	53-85	26-80	21-74	15-35	3-15
	3-13	sil, l (cn-cnv) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	29-55	19-55	15-50	15-30	3-15
	13-17	uwb (none)			---	---	---	---	---	---	---	---
43C,43D,43E:												
Taconic---------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	26-80	21-74	---	---
	1-3	sil, l (cn-cnv)	CL, CL-ML, ML, SM	A-2-4, A-4, A-6	1-5	5-40	65-85	53-85	26-80	21-74	15-35	3-15
	3-13	sil, l (cn-cnv) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	29-55	19-55	15-50	15-30	3-15
	13-17	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
43C,43D,43E:												
Macomber--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	31-80	25-75	---	---
	1-3	sil, l (cn-cnv)	CL, ML, SC-SM, SM	A-2-4, A-4, A-6	1-5	5-30	55-85	51-82	31-80	25-75	15-35	3-15
	3-37	sil, l (cn-cnv-cnx) *	GC, GC-GM, GM	A-1-a, A-2-4, A-4, A-6	0-1	5-15	30-60	24-56	20-52	15-48	15-35	3-15
	37-41	uwb (none)			---	---	---	---	---	---	---	---
44B,44C,44D:												
Dutchess--------	0-5	sil, l (cn)	GM, ML, SM	A-1-b, A-2-4, A-4	0-1	0-15	60-90	52-90	26-76	18-53	15-33	NP-4
	5-26	sil, l (cn)	ML, SM	A-1-b, A-2-4, A-4	0-2	5-30	70-100	54-93	35-90	25-63	15-33	NP-4
	26-70	sil, l, fsl (cn-cnv) *	CL-ML, GM, ML, SM	A-1-b, A-2-4, A-4	0-2	5-30	55-80	53-76	32-68	22-50	15-25	NP-4
47C,47D,47E:												
Dutchess--------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	26-76	18-53	---	---
	2-7	sil, l (cn)	GM, ML, SM	A-1-b, A-2-4, A-4	1-5	5-20	60-90	52-90	26-76	18-53	0-33	NP-4
	7-28	sil, l (cn)	ML, SM	A-1-b, A-2-4, A-4	0-2	5-30	70-100	54-93	35-90	25-63	0-33	NP-4
	28-72	sil, l, fsl (cn-cnv) *	CL-ML, GM, ML, SM	A-1-b, A-2-4, A-4	0-2	5-30	55-80	53-76	32-68	22-50	0-25	NP-4
48B,48C,48D:												
Pittstown-------	0-6	sil, l, vfsl (cn-gr)	CL-ML, ML, SC-SM	A-2-4, A-4, A-7	0-1	0-5	80-100	63-92	42-92	28-65	25-45	4-15
	6-23	sil, l, vfsl (gr-cn)	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-5	0-15	80-95	63-92	32-88	22-63	20-35	2-10
	23-65	sil, l, vfsl (cn-gr) *	CL-ML, GM, ML, SM	A-2-4, A-4	0-5	0-15	60-90	52-73	34-70	26-64	20-30	2-7
49C,49D:												
Pittstown-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	42-92	28-65	---	---
	1-6	sil, l, vfsl (cn-gr)	CL-ML, ML, SC-SM	A-2-4, A-4, A-7	0-1	0-5	80-100	63-92	42-92	28-65	25-45	4-15
	6-23	sil, l, vfsl (gr-cn)	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-5	0-15	80-95	63-92	32-88	22-63	20-35	2-10
	23-65	sil, l, vfsl (cn-gr) *	CL-ML, GM, ML, SM	A-2-4, A-4	0-5	0-15	60-90	52-73	34-70	26-64	20-30	2-7

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
50B:												
Brayton---------	0-6	sil, l, fsl (cn)	CL, ML, SM	A-4	0-1	0-4	85-100	69-92	52-86	35-60	0-30	NP-10
	6-15	sil, l, fsl (cn)	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0-6	0-6	70-95	69-92	35-85	25-70	0-30	NP-7
	15-65	sil, l, fsl (cn)	SM, CL-ML, ML	A-1-b, A-2-4, A-4	0-6	0-6	70-92	63-85	40-80	25-65	0-30	NP-7
51B:												
Brayton---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	52-86	35-60	---	---
	2-8	sil, l, fsl (cn)	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-1	0-4	83-100	69-92	52-86	35-60	0-30	NP-7
	8-17	sil, l, fsl (cn)	SM, CL-ML, ML, SC-SM	A-1-b, A-2-4, A-4	0-6	0-6	70-95	69-92	35-85	25-70	0-30	NP-7
	17-67	sil, l, fsl (cn)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0-6	0-6	70-92	63-85	40-80	25-65	0-30	NP-7
52A:												
Mansfield-------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	37-99	29-82	---	---
	2-13	sil, l, vfsl (cn-mk-gr)	ML, SM, CL-ML	A-4, A-7-5	0-1	0-5	75-100	63-99	37-99	29-82	0-45	NP-14
	13-22	sil, l, vfsl (gr-cn)	SC-SM, ML, SM	A-4, A-6	0	0-10	70-100	63-99	37-95	25-70	0-40	NP-12
	22-67	sil, l, vfsl, fsl (cn-gr)	ML, GM, SM	A-1-b, A-2-4, A-4	0	0-10	65-95	52-82	37-80	25-60	0-30	NP-6
64B,64C,64D:												
Stockbridge-----	0-9	sil, l, vfsl (gr)	CL-ML, ML, SM	A-4	0-1	0-10	80-95	52-92	45-85	30-65	20-40	3-12
	9-24	sil, l (gr)	SM, CL-ML, ML	A-4	0-1	0-10	70-95	52-92	40-85	30-65	20-40	3-12
	24-36	sil, l (gr)	ML, SM, CL-ML	A-4	0-1	0-10	60-95	52-92	35-85	25-65	20-40	3-12
	36-65	sil, l (gr)	GM, SM, ML, CL-ML	A-1-b, A-2-4, A-4, A-6	0-1	0-10	50-92	36-92	22-85	15-65	15-40	NP-12
65C,65D:												
Stockbridge-----	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-85	30-65	---	---
	1-9	sil, l, vfsl (gr)	CL-ML, ML, SM	A-4	0-1	0-10	80-95	52-92	45-85	30-65	20-40	3-12
	9-24	sil, l (gr)	SM, ML, CL-ML	A-4	0-1	0-10	70-95	52-92	40-85	30-65	20-40	3-12
	24-36	sil, l (gr)	CL-ML, ML, SM	A-4	0-1	0-10	60-95	52-92	35-85	25-65	20-40	3-12
	36-65	sil, l (gr)	CL-ML, GM, ML, SM	A-1-b, A-2-4, A-4, A-6	0-1	0-10	50-92	36-92	22-85	15-65	15-40	NP-12

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
66A,66B,66C,66D:												
Georgia---------	0-10	sil, l (gr)	SM, CL, CL-ML, ML	A-2-4, A-4	0-1	0-10	90-100	52-99	45-93	35-70	15-30	NP-10
	10-30	sil, l, fsl (gr)	CL, ML, CL-ML, SM	A-1-b, A-2-4, A-4	0-5	0-20	65-100	52-99	30-95	20-80	15-25	NP-10
	30-65	sil, l, fsl (gr)	CL-ML, SM, ML, CL	A-1-b, A-2-4, A-4	0-5	0-20	65-100	52-99	30-95	20-80	15-25	NP-10
67B,67C:												
Georgia---------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-93	35-70	---	---
	1-10	sil, l (gr)	SM, CL, CL-ML, ML	A-2-4, A-4	0-1	0-10	90-100	52-99	45-93	35-70	0-30	NP-10
	10-30	sil, l, fsl (gr)	SM, CL-ML, ML, CL	A-1-b, A-2-4, A-4	0-5	0-20	65-100	52-99	30-95	20-90	0-25	NP-10
	30-65	sil, l, fsl (gr)	ML, CL, CL-ML, SM	A-1-b, A-2-4, A-4	0-5	0-20	65-100	52-99	30-95	20-80	0-25	NP-10
68A,68B:												
Massena---------	0-8	sil, l, fsl (gr)	CL, SC	A-6, A-7-6	0-1	0-5	80-95	52-92	50-90	45-80	35-45	12-20
	8-24	l, fsl (gr)	CL, CL-ML, GC-GM	A-2-4, A-4, A-6, A-1-b	0-1	0-5	55-95	52-92	25-85	17-63	15-25	5-15
	24-65	l, fsl (gr-grv)	CL, CL-ML, GC, SC	A-1-a, A-2-4, A-4, A-6	0-1	0-5	40-95	36-92	18-85	12-62	15-25	5-15
69A,69B:												
Massena---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	45-80	---	---
	2-10	sil, l, fsl (gr)	CL, SC	A-6, A-7-6	0-1	0-5	80-95	52-92	50-90	45-80	35-45	12-20
	10-26	l, fsl (gr)	CL, CL-ML, GC-GM	A-2-4, A-4, A-6, A-1-b	0-1	0-5	55-95	52-92	25-85	17-63	15-25	5-15
	26-67	l, fsl (gr-grv)	CL, CL-ML, GC, SC	A-1-a, A-2-4, A-4, A-6	0-1	0-5	40-95	36-92	18-85	12-62	15-25	5-15
70A,70B,70C,70D, 70E:												
Groton----------	0-8	l, fsl, sl (gr-grv) *	GM, SM	A-1-a, A-1-b, A-2-4, A-4	0	0-10	55-85	36-67	25-60	13-43	0-14	NP
	8-14	fsl, sl (gr-grv) *	GM, SM	A-1-a, A-1-b, A-2-4	0	0-20	55-85	36-65	25-50	12-40	0-14	NP
	14-22	sl, lfs, ls (gr-grv) *	GM, SM, GP-GM	A-1-a, A-1-b	0	0-20	40-80	36-65	15-45	8-36	0-14	NP
	22-65	lfs, s, cos (gr-grv-grx) *	GP, GP-GM, SP	A-1-a, A-1-b	0	0-25	35-70	19-56	7-35	2-9	0-14	NP

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
71A,71B:												
Hero------------	0-8	sil, l, fsl (gr)	GM, ML, SM	A-1-b, A-2-4, A-4	0	0-5	60-92	52-92	37-87	15-50	0-25	NP-4
	8-24	sil, l, fsl (gr)	GM, ML, SM	A-1-b, A-2-4, A-4	0	0-10	60-92	52-92	39-88	16-50	0-25	NP-4
	24-65	lfs, ls, lcos, fs, s, cos (gr-grv) *	GM, GP, SM, SP	A-1-a, A-1-b	0	0-20	40-85	28-73	13-50	2-15	0-14	NP
72A:												
Fredon----------	0-9	sil, l, vfsl, fsl (gr)	SC, SC-SM, SM	A-4, A-2-4	0	0-2	95-100	52-96	50-95	28-50	15-30	NP-10
	9-23	sil, l, vfsl, fsl (gr)	CL, ML, SC, SM	A-1-b, A-2-4, A-4	0	0-2	60-100	52-96	27-95	22-82	15-30	NP-10
	23-65	lfs, ls, cos (gr-grv)	GP, GW, SC-SM, SW-SM	A-1-a, A-1-b, A-2-4	0	0-5	30-90	28-84	6-49	1-26	10-20	NP-5
84B,84C,84D:												
Nellis----------	0-8	sil, fsl (gr)	ML, SM	A-2-4, A-4	0-1	0-5	75-100	52-92	45-90	35-76	30-35	1-5
	8-23	sil, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	22-76	20-25	1-5
	23-31	l, fsl (gr-grv)	SC-SM, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	12-50	20-25	1-5
	31-65	l, fsl (gr-grv)	CL-ML, SM, SP-SM	A-1-a, A-1-b, A-2-4, A-4	0-1	0-5	60-95	35-92	18-92	8-52	0-25	NP-5
85B,85C,85D,85E:												
Nellis----------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	35-76	---	---
	1-8	sil, fsl (gr)	GM, ML, SM	A-2-4, A-4	0-5	0-5	75-100	52-92	45-90	35-76	30-35	1-5
	8-23	sil, fsl (gr)	CL-ML, ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	22-76	20-25	1-5
	23-31	l, fsl (gr-grv)	SC-SM, SM	A-1-b, A-2-4, A-4	0-1	0-5	75-95	52-92	28-90	12-50	20-25	1-5
	31-65	l, fsl (gr-grv)	CL-ML, SM, SP-SM	A-1-a, A-1-b, A-2-4, A-4	0-1	0-5	60-95	35-92	18-92	8-52	0-25	NP-5
86A,86B,86C:												
Amenia----------	0-5	sil, l, fsl (gr)	CL-ML, ML, SM	A-4	0-1	0-5	80-100	52-92	45-90	36-80	0-30	NP-10
	5-23	sil, l, fsl (gr)	CL, CL-ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	80-95	52-92	27-85	21-76	0-30	NP-10
	23-65	sil, l, fsl (gr)	GC, GM, SC, SC-SM	A-1-b, A-2-4, A-4	0-1	0-15	55-90	52-90	37-85	17-50	0-30	NP-10

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
87B,87C:												
Amenia----------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	36-80	---	---
	2-7	sil, l, fsl (gr)	CL-ML, ML, SM	A-4	0-1	0-5	80-100	52-92	45-90	36-80	0-30	NP-10
	7-25	sil, l, fsl (gr)	CL, CL-ML, SM	A-1-b, A-2-4, A-4	0-1	0-5	80-95	52-92	27-85	21-76	0-30	NP-10
	25-65	sil, l, fsl (gr)	GC, GM, SC, SC-SM	A-1-b, A-2-4, A-4	0-1	0-15	55-90	52-90	37-85	17-50	0-30	NP-10
90C,90E:												
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6
93B,93C,93D:												
Pittsfield------	0-7	l, fsl (gr)	ML, SM	A-2-4, A-4	0-1	0-5	80-100	69-92	50-90	28-53	0-40	NP-6
	7-29	l, fsl (gr)	CL-ML, SM	A-1-b, A-2-4, A-4	0-5	0-20	75-96	69-92	50-90	23-53	0-20	NP-4
	29-65	l, fsl, sl (gr)	ML, SM	A-1-b, A-2-4, A-4	0-5	0-25	75-96	52-92	45-90	25-52	0-20	NP-3
94B,94C,94D,94E:												
Pittsfield------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	28-53	---	---
	1-7	l, fsl (gr)	ML, SM	A-2-4, A-4	0-1	0-5	80-100	69-92	50-90	28-53	0-40	NP-6
	7-29	l, fsl (gr)	CL-ML, SM	A-1-b, A-2-4, A-4	0-5	0-20	75-96	69-92	50-90	23-53	0-20	NP-4
	29-65	l, fsl, sl (gr)	ML, SM	A-1-b, A-2-4, A-4	0-5	0-25	75-96	52-92	45-90	25-52	0-20	NP-3
95C,95D,95E:												
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
96D,96F												
Hogback---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-48	---	---
	2-6	l, fsl (gr)	SM	A-2-4, A-4, A-5	1-5	1-5	85-100	51-92	45-90	20-48	20-50	NP-10
	6-17	l, fsl (gr-grv)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	51-90	30-90	15-45	20-50	NP-10
	17-21	uwb (none)			---	---	---	---	---	---	---	---
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Rock Outcrop----	0-65	uwb (none)			---	---	---	---	---	---	---	---
100B:												
Wilmington------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-45	---	---
	2-6	sil, l, vfsl, fsl (gr)	SM	A-2-4, A-4, A-5	0-2	0-5	80-100	52-92	45-90	20-45	20-50	NP-10
	6-26	sil, l, vfsl, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	65-100	52-90	25-85	15-48	20-50	NP-10
	26-67	sil, l, vfsl, fsl (gr)	SC, SC-SM, SM	A-2-4, A-4	0-5	0-20	65-100	52-90	37-85	15-48	15-30	NP-10
102B,102C:												
Mundal----------	0-4	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	4-23	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	23-65	l, fsl, sl (gr)	SC, SM	A-2-4, A-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10
104B,104C,104E:												
Colton----------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	15-60	2-25	---	---
	2-8	fsl, ls, lcos (gr-grv) *	GP, SM	A-1-a, A-1-b, A-2-4	0-20	5-30	35-75	32-66	15-60	2-25	0-10	NP-2
	8-28	ls, s, cos (gr-grv) *	GM, SM, GW	A-1-a, A-1-b	0-1	5-20	30-80	30-75	20-50	2-20	0-14	NP
	28-67	s, cos (grv-grx) *	SP-SM, GP	A-1-a	0-1	10-45	20-58	20-50	10-30	0-5	0-14	NP

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
105B,105C,105D 105E:												
Monadnock-------	0-6	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	30-90	16-52	---	---
	6-8	l, fsl, sl (gr)	ML, SM	A-2-4, A-4	0-1	0-10	80-100	56-99	30-90	16-52	0-18	NP
	8-21	l, vfsl, fsl (cb-gr)	ML, SM	A-2-4, A-4, A-1-b	0-1	0-15	80-100	56-99	43-90	25-52	0-12	NP
	21-71	lfs, ls, lcos (cb-cbv-gr-grv)	SM, SP-SM	A-1-a, A-2-4	0-1	0-35	65-95	28-90	20-56	8-26	0-14	NP
106B,106C,106D 106E:												
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6
108B,108C,108D:												
Peru------------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	46-87	21-45	---	---
	2-8	l, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-10	90-100	57-92	46-87	21-45	0-30	NP-6
	8-22	l, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-1	0-15	75-95	57-90	40-85	20-45	0-30	NP-6
	22-67	l, fsl, sl (gr)	SM	A-2-4, A-4, A-1-b	0-1	0-15	70-100	57-99	40-85	20-45	0-30	NP-6
109C,109D,109E:												
Tunbridge-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	25-45	---	---
	1-3	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-5	85-100	52-92	50-90	25-45	0-20	NP-2
	3-16	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-2	0-15	70-100	52-90	35-89	20-50	0-50	NP-6
	16-24	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-2	0-15	70-100	52-90	35-89	20-50	0-20	NP-2
	24-28	uwb (none)			---	---	---	---	---	---	---	---
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
111C,111D,111E:												
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-5, A-4, A-2-4	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-5, A-2-4, A-4	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-5, A-2-4, A-4	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10
112C,112D,112E:												
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-5, A-2-4, A-4	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-4, A-2-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Hogback---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-48	---	---
	2-6	l, fsl (gr)	SM	A-2-4, A-4, A-5	1-5	1-5	85-100	51-92	45-90	20-48	20-50	NP-10
	6-17	l, fsl (gr-grv)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	51-90	30-90	15-45	20-50	NP-10
	17-21	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
113B:												
Cabot-----------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	42-84	33-66	---	---
	1-9	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-2	0-5	80-95	52-91	42-84	33-66	15-25	NP-5
	9-15	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-5	0-30	80-95	52-91	50-85	35-70	15-25	NP-5
	15-66	sil, l, fsl (gr)	CL-ML, ML, SC-SM, SM	A-2, A-4	0-5	0-20	80-95	52-91	50-87	22-55	15-25	NP-5
114B,114C,114D:												
Mundal----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-95	20-48	---	---
	3-7	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	7-26	l, fsl, sl (gr)	SM	A-2-4, A-5, A-4	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	26-68	l, fsl, sl (gr)	SC, SM	A-4, A-2-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10
115B,115C,115D:												
Peru------------	0-6	l, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-10	90-100	57-92	46-87	21-45	0-30	NP-6
	6-20	l, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-1	0-15	75-95	57-90	40-85	20-45	0-30	NP-6
	20-65	l, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-1	0-15	70-100	57-99	40-85	20-45	0-30	NP-6
116D,116F:												
Lyman-----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	35-80	15-45	---	---
	3-5	sil, vfsl, fsl, sl (cn-gr)	SM	A-1-b, A-2-4, A-4	0-1	1-20	65-95	52-90	35-80	15-45	0-30	NP-6
	5-19	sil, vfsl, fsl, sl (cn-gr)	GM, SM	A-1-b, A-2-4, A-4	0-3	0-20	65-95	52-90	35-85	15-45	0-30	NP-4
	19-23	uwb (none)			---	---	---	---	---	---	---	---
Tunbridge-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	25-45	---	---
	1-3	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-5	85-100	52-92	50-90	25-45	0-20	NP-2
	3-16	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-2	0-15	70-100	52-90	35-89	20-50	0-50	NP-6
	16-24	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-2	0-15	70-100	52-90	35-89	20-50	0-20	NP-2
	24-28	uwb (none)			---	---	---	---	---	---	---	---
Rock Outcrop----	0-65	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
117B,117C,117D:												
Berkshire-------	0-5	l, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-10	75-95	52-82	41-80	20-41	0-30	NP-10
	5-30	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-30	NP-10
	30-65	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6
118C,118D,118E:												
Tunbridge-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	25-45	---	---
	1-3	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-5	85-100	52-92	50-90	25-45	0-20	NP-2
	3-16	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-2	0-15	70-100	52-90	35-89	20-50	0-50	NP-6
	16-24	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-2	0-15	70-100	52-90	35-89	20-50	0-20	NP-2
	24-28	uwb (none)			---	---	---	---	---	---	---	---
Lyman-----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	35-80	15-45	---	---
	3-5	sil, vfsl, fsl, sl (cn-gr)	SM	A-1-b, A-2-4, A-4	0-1	1-20	65-95	52-90	35-80	15-45	0-30	NP-6
	5-19	sil, vfsl, fsl, sl (cn-gr)	GM, SM	A-1-b, A-2-4, A-4	0-3	0-20	65-95	52-90	35-85	15-45	0-30	NP-4
	19-23	uwb (none)			---	---	---	---	---	---	---	---
221F:												
Tunbridge-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	25-45	---	---
	1-3	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-5	85-100	52-92	50-90	25-45	0-20	NP-2
	3-16	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-2	0-15	70-100	52-90	35-89	20-50	0-50	NP-6
	16-24	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-2	0-15	70-100	52-90	35-89	20-50	0-20	NP-2
	24-28	uwb (none)			---	---	---	---	---	---	---	---
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
403B:												
Cabot-----------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	42-84	33-66	---	---
	1-9	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-2	0-5	80-95	52-91	42-84	33-66	15-25	NP-5
	9-15	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-5	0-30	80-95	52-91	50-85	35-70	15-25	NP-5
	15-66	sil, l, fsl (gr)	CL-ML, ML, SC-SM, SM	A-2, A-4	0-5	0-20	80-95	52-91	50-87	22-55	15-25	NP-5
Carlisle--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	100	100	---	---	---	---
	1-65	mpt, muck (none)	PT	A-8	0	0	100	100	---	---	---	---
405D:												
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6
Tunbridge-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-90	25-45	---	---
	1-3	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-5	85-100	52-92	50-90	25-45	0-20	NP-2
	3-16	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-2	0-15	70-100	52-90	35-89	20-50	0-50	NP-6
	16-24	l, vfsl, fsl, sl (gr)	SM	A-2-4, A-4	0-2	0-15	70-100	52-90	35-89	20-50	0-20	NP-2
	24-28	uwb (none)			---	---	---	---	---	---	---	---
413D:												
Peru------------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	46-87	21-45	---	---
	2-8	l, fsl, sl (gr)	SM	A-2-4, A-4	0-1	0-10	90-100	57-92	46-87	21-45	0-30	NP-6
	8-22	l, fsl, sl (gr)	SM	A-2-4, A-4, A-1-b	0-1	0-15	75-95	57-90	40-85	20-45	0-30	NP-6
	22-67	l, fsl, sl (gr)	SM	A-2-4, A-1-b, A-4	0-1	0-15	70-100	57-99	40-85	20-45	0-30	NP-6
Berkshire-------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	41-80	20-41	---	---
	1-6	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	75-95	52-82	41-80	20-41	0-50	NP-10
	6-31	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-95	52-81	38-80	18-41	0-50	NP-10
	31-66	l, fsl, sl (gr)	SM	A-2-4, A-4	0-10	0-20	75-90	52-81	42-81	22-46	0-20	NP-6

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
413D:												
Cabot-----------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	42-84	33-66	---	---
	1-9	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-2	0-5	80-95	52-91	42-84	33-66	15-25	NP-5
	9-15	sil, fsl (gr)	CL-ML, ML, SM	A-2-4, A-4	0-5	0-30	80-95	52-91	50-85	35-70	15-25	NP-5
	15-66	sil, l, fsl (gr)	CL-ML, ML, SC-SM, SM	A-2, A-4	0-5	0-20	80-95	52-91	50-87	22-55	15-25	NP-5
702E:												
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Hogback---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-48	---	---
	2-6	l, fsl (gr)	SM	A-2-4, A-4, A-5	1-5	1-5	85-100	51-92	45-90	20-48	20-50	NP-10
	6-17	l, fsl (gr-grv)	SM	A-5, A-2-4, A-4	0-5	0-20	75-100	51-90	30-90	15-45	20-50	NP-10
	17-21	uwb (none)			---	---	---	---	---	---	---	---
703C:												
Mundal----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-95	20-48	---	---
	3-7	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	7-26	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	26-68	l, fsl, sl (gr)	SC, SM	A-2-4, A-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
705D:												
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10
Mundal----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-95	20-48	---	---
	3-7	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	7-26	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	26-68	l, fsl, sl (gr)	SC, SM	A-2-4, A-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10
715D:												
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
902F:												
Hogback---------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-48	---	---
	2-6	l, fsl (gr)	SM	A-5, A-2-4, A-4	1-5	1-5	85-100	51-92	45-90	20-48	20-50	NP-10
	6-17	l, fsl (gr-grv)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	51-90	30-90	15-45	20-50	NP-10
	17-21	uwb (none)			---	---	---	---	---	---	---	---
Rawsonville-----	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	65-90	28-48	---	---
	2-3	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	85-100	69-100	65-90	28-48	20-50	NP-10
	3-20	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	75-100	69-100	35-90	15-43	20-50	NP-10
	20-25	fsl, sl (gr)	GM, SC, SM	A-1-b, A-2-4, A-4	0-5	0-5	60-95	52-92	24-85	10-40	15-30	NP-10
	25-29	uwb (none)			---	---	---	---	---	---	---	---
Rock Outcrop----	0-65	uwb (none)			---	---	---	---	---	---	---	---
903C:												
Mundal----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-95	20-48	---	---
	3-7	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	7-26	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	26-68	l, fsl, sl (gr)	SC, SM	A-2-4, A-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10
Wilmington------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-45	---	---
	2-6	sil, l, vfsl, fsl (gr)	SM	A-5, A-2-4, A-4	0-2	0-5	80-100	52-92	45-90	20-45	20-50	NP-10
	6-26	sil, l, vfsl, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	65-100	52-90	25-85	15-48	20-50	NP-10
	26-67	sil, l, vfsl, fsl (gr)	SC, SC-SM, SM	A-2-4, A-4	0-5	0-20	65-100	52-90	37-85	15-48	15-30	NP-10

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
905D:												
Houghtonville---	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	40-86	15-40	---	---
	2-4	sil, l, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	75-100	52-90	40-86	15-40	20-50	NP-10
	4-37	sil, l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-5	75-100	52-91	37-90	15-40	20-50	NP-10
	37-67	sil, fsl, sl (gr)	SM	A-1-b, A-2-4, A-4	0-5	0-10	60-95	52-90	35-90	15-40	0-30	NP-10
Monadnock-------	0-6	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	30-90	16-52	---	---
	6-8	l, fsl, sl (gr)	ML, SM	A-4, A-2-4	0-1	0-10	80-100	56-99	30-90	16-52	0-18	NP
	8-21	l, vfsl, fsl (cb-gr)	ML, SM	A-1-b, A-2-4, A-4	0-1	0-15	80-100	56-99	43-90	25-52	0-12	NP
	21-71	lfs, ls, lcos (cb-cbv-gr-grv)	SM, SP-SM	A-1-a, A-2-4	0-1	0-35	65-95	28-90	20-56	8-26	0-14	NP
913E:												
Glebe-----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	50-85	25-50	---	---
	3-11	sil, vfsl, fsl (gr)	ML, SM	A-2-4, A-4	1-5	0-5	75-100	52-92	50-85	25-50	10-40	NP-10
	11-28	sil, vfsl, fsl, sl, ls (gr)	GM, ML, SM	A-2-4, A-1-b, A-4	0-5	0-5	65-95	52-92	25-85	15-50	10-40	NP-10
	28-32	uwb (none)			---	---	---	---	---	---	---	---
Stratton--------	0-1	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	17-60	13-55	---	---
	1-7	sil, l, fsl (cn-cnv-gr-grv) *	ML, SM	A-2-4, A-2-5, A-4, A-5	1-5	5-20	60-90	30-63	17-60	13-55	20-50	NP-10
	7-15	sil, l, fsl (cn-cnv-gr-grv) *	GM, GP, SM	A-2-4, A-1-a, A-1-b, A-5	0-20	0-60	30-80	28-49	0-47	0-40	20-50	NP-10
	15-20	sil, l, fsl (cn-cnv-gr-grv) *	SM, GM, GP	A-1-a, A-1-b, A-2-4, A-4, A-5	5-20	15-60	35-80	33-60	0-50	0-45	20-50	NP-10
	20-24	uwb (none)			---	---	---	---	---	---	---	---

Table 14.—Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture (texture modifiers allowed)	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
923B:												
Wilmington------	0-2	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-90	20-45	---	---
	2-6	sil, l, vfsl, fsl (gr)	SM	A-2-4, A-4, A-5	0-2	0-5	80-100	52-92	45-90	20-45	20-50	NP-10
	6-26	sil, l, vfsl, fsl (gr)	SM	A-2-4, A-4, A-5	0-5	0-20	65-100	52-90	25-85	15-48	20-50	NP-10
	26-67	sil, l, vfsl, fsl (gr)	SM, SC, SC-SM	A-2-4, A-4	0-5	0-20	65-100	52-90	37-85	15-48	15-30	NP-10
Mundal----------	0-3	spm, mpm, hpm (none)	PT	A-8	0	0	98-100	97-100	45-95	20-48	---	---
	3-7	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-1	0-10	85-100	63-99	45-95	20-48	20-50	NP-10
	7-26	l, fsl, sl (gr)	SM	A-2-4, A-4, A-5	0-5	0-10	80-100	63-99	45-95	20-48	20-50	NP-10
	26-68	l, fsl, sl (gr)	SC, SM	A-2-4, A-4	0-5	0-20	70-95	52-90	40-90	18-45	0-30	NP-10

Table 15.—Physical and Chemical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
3A,3B,3C,3D,3E:													
Copake--------------	0-6	35-75	15-65	4-18	1.10-1.40	0.6-6	0.10-0.18	0.0-2.9	2.0-5.0	.24	.32	3	4.5-7.3
	6-22	35-75	15-65	4-18	1.25-1.55	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.24	.28		5.1-7.3
	22-65	70-100	0-28	1-10	1.45-1.70	20-100	0.01-0.06	0.0-2.9	0.0-1.0	.10	.17		6.1-8.4
9:													
Pits----------------	0-65	---	---	---	---	0.01-20	0.00-0.00	---	---	---	---	--	---
Dumps---------------	0-65	---	---	---	---	0.0015-0.06	0.00-0.00	---	---	---	---	--	---
10D,10E:													
Glebe---------------	0-3	35-75	15-65	1-7	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	3-11	35-75	15-65	1-7	0.80-1.00	2-6	0.15-0.19	0.0-2.9	8.0-20	.43	.55		3.6-5.5
	11-28	35-75	15-65	1-12	0.60-1.00	2-6	0.35-0.45	0.0-2.9	5.0-20	.64	.64		3.6-5.5
	28-32	---	---	---	---	0.01-20	---	---	---	---	---		---
Stratton------------	0-1	35-75	15-65	1-7	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-7	35-75	15-65	1-7	0.80-1.50	0.6-6	0.15-0.22	0.0-2.9	8.0-20	.43	.49		3.6-5.5
	7-15	35-75	15-65	1-12	0.60-1.10	0.6-6	0.14-0.45	0.0-2.9	5.0-20	.64	.64		3.6-5.5
	15-20	35-75	15-65	1-10	0.70-1.10	0.6-6	0.10-0.35	0.0-2.9	5.0-20	.49	.64		3.6-5.5
	20-24	---	---	---	---	0.01-20	---	---	---	---	---		---
Londonderry---------	0-1	35-75	15-65	2-7	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-4	35-75	15-65	2-7	1.10-1.30	0.6-2	0.11-0.23	0.0-2.9	2.0-8.0	.43	.43		3.6-5.5
	4-6	35-75	15-65	2-7	1.10-1.30	0.6-2	0.14-0.22	0.0-2.9	0.5-2.0	.43	.43		3.6-5.5
	6-10	---	---	---	---	0.01-20	---	---	---	---	---		---
11F:													
Taconic-------------	0-1	25-50	30-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-3	25-50	30-65	10-27	1.10-1.40	0.6-6	0.09-0.15	0.0-2.9	2.0-6.0	.24	.37		4.5-5.5
	3-13	25-50	30-65	10-27	1.20-1.50	0.6-6	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	13-17	---	---	---	---	0.01-20	---	---	---	---	---		---
Hubbardton----------	0-2	35-75	15-65	3-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	2-4	35-75	15-65	3-18	1.10-1.40	0.6-6	0.13-0.17	0.0-2.9	1.0-4.0	.24	.28		4.5-5.5
	4-8	35-75	15-65	3-18	1.10-1.40	0.6-6	0.07-0.12	0.0-2.9	0.0-1.0	.20	.28		4.5-5.5
	8-12	---	---	---	---	0.01-20	---	---	---	---	---		---
Rock Outcrop--------	0-65	---	---	---	---	0.01-20	0.00-0.00	---	---	---	---	--	---
18B,18C,18E:													
Windsor-------------	0-4	70-87	10-28	1-3	1.00-1.20	6-20	0.09-0.12	0.0-2.9	2.0-4.0	.17	.17	5	4.5-6.0
	4-22	70-87	10-30	0-3	1.30-1.55	6-20	0.07-0.10	0.0-2.9	0.5-2.0	.17	.17		4.5-6.0
	22-65	70-100	0-30	0-2	1.40-1.65	6-20	0.04-0.10	0.0-2.9	0.0-0.5	.10	.10		4.5-6.5

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
21A:													
Limerick------------	0-6	10-60	30-80	4-10	1.10-1.50	0.6-2	0.18-0.30	0.0-2.9	2.0-5.0	.49	.49	5	5.1-7.3
	6-11	10-60	30-80	2-10	1.10-1.50	0.6-2	0.18-0.26	0.0-2.9	0.0-2.0	.49	.49		5.6-7.3
	11-65	10-60	30-80	1-8	1.20-1.50	0.6-2	0.18-0.25	0.0-2.9	0.0-2.0	.49	.49		5.6-7.3
23A:													
Adrian--------------	0-2	---	---	---	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-35	---	---	---	0.30-0.55	0.2-6	0.35-0.45	---	55-75	---	---		5.1-7.3
	35-65	75-100	0-25	2-10	1.40-1.75	6-20	0.03-0.08	0.0-2.9	0.0-1.0	.15	.15		5.6-8.4
Saco----------------	0-7	0-60	30-90	4-15	1.00-1.40	0.6-2	0.20-0.30	0.0-2.9	3.0-10	.49	.49	4	5.1-7.3
	7-22	0-60	30-90	2-15	1.20-1.50	0.6-2	0.16-0.26	0.0-2.9	0.5-3.0	.64	.64		5.1-7.3
	22-41	0-60	30-90	2-15	1.20-1.50	0.6-2	0.16-0.26	0.0-2.9	0.0-1.0	.64	.64		5.6-7.3
	41-65	75-100	0-25	1-8	1.30-1.60	6-20	0.01-0.13	0.0-2.9	0.0-1.0	.10	.15		5.6-7.3
24A:													
Carlisle------------	0-1	---	---	---	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-65	---	---	---	0.13-0.23	0.2-6	0.35-0.45	---	70-100	---	---		4.5-7.3
25B:													
Belgrade------------	0-9	0-60	30-90	4-15	0.95-1.15	0.6-2	0.18-0.25	0.0-2.9	1.0-5.0	.49	.49	5	4.5-7.3
	9-21	0-60	30-90	4-15	1.10-1.40	0.6-2	0.16-0.20	0.0-2.9	0.5-3.0	.64	.64		4.5-7.3
	21-65	0-60	30-90	2-20	1.20-1.40	0.06-6	0.06-0.20	0.0-2.9	0.0-1.0	.64	.64		6.1-7.8
26A:													
Raynham-------------	0-8	0-60	30-90	3-16	1.20-1.50	0.2-2	0.18-0.24	0.0-2.9	3.0-10	.49	.49	5	5.1-7.3
	8-16	0-60	30-90	3-16	1.20-1.50	0.2-2	0.18-0.22	0.0-2.9	0.5-2.0	.64	.64		5.1-7.3
	16-65	0-60	30-90	3-16	1.20-1.60	0.06-0.2	0.17-0.21	0.0-2.9	0.0-0.5	.64	.64		5.6-7.8
27B:													
Udipsamments--------	0-65	86-100	0-12	0-1	1.30-1.70	20-100	0.02-0.05	0.0-2.9	0.0-0.5	.10	.15	--	5.6-7.8
Udorthents----------	0-65	---	---	1-15	1.00-2.00	0.06-20	0.01-0.20	0.0-2.9	0.5-10	---	---	--	4.5-7.3
28A:													
Udifluvents---------	0-6	---	---	---	---	2-100	---	---	---	---	---	--	---
	6-65	86-100	0-12	---	---	2-100	---	---	---	---	---		---
29A:													
Occum---------------	0-10	50-75	15-50	2-12	1.05-1.40	0.6-6	0.11-0.18	0.0-2.9	2.0-6.0	.20	.20	3	4.5-7.3
	10-36	40-75	15-50	2-12	1.20-1.50	0.6-6	0.10-0.20	0.0-2.9	0.5-3.0	.20	.20		4.5-6.5
	36-65	70-100	0-30	0-5	1.30-1.60	6-20	0.01-0.10	0.0-2.9	0.0-1.0	.17	.20		4.5-6.5

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
34A:													
Pootatuck-----------	0-10	50-75	15-50	2-6	1.10-1.35	0.6-6	0.11-0.21	0.0-2.9	2.0-6.0	.20	.20	3	4.5-7.3
	10-33	40-75	15-50	1-8	1.20-1.45	0.6-6	0.09-0.18	0.0-2.9	0.5-3.0	.20	.20		4.5-6.5
	33-65	70-100	0-30	0-2	1.25-1.50	6-20	0.01-0.10	0.0-2.9	0.0-1.0	.17	.20		4.5-6.5
35B:													
Hartland------------	0-9	0-60	30-90	3-10	1.10-1.50	0.6-2	0.18-0.24	0.0-2.9	2.0-8.0	.49	.49	5	5.1-7.8
	9-18	0-60	30-90	3-10	1.20-1.50	0.6-2	0.18-0.22	0.0-2.9	0.5-3.0	.64	.64		5.1-7.8
	18-65	0-90	10-90	3-16	1.20-1.60	0.2-2	0.17-0.21	0.0-2.9	0.0-1.0	.64	.64		5.1-7.8
40B,40C:													
Galway--------------	0-2	30-50	30-65	7-18	1.10-1.40	0.6-2	0.15-0.21	0.0-2.9	2.0-6.0	.32	.32	2	5.6-7.3
	2-19	30-75	15-65	5-18	1.20-1.50	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	19-30	30-75	15-65	3-18	1.20-1.50	0.6-2	0.04-0.14	0.0-2.9	0.0-1.0	.24	.32		7.4-8.4
	30-34	---	---	---	---	0.01-20	---	---	---	---	---		---
Nellis--------------	0-8	30-75	15-65	5-18	1.30-1.60	0.6-2	0.13-0.20	0.0-2.9	2.0-6.0	.32	.32	3	5.6-7.3
	8-23	30-75	15-65	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.3
	23-31	40-75	15-50	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	31-65	40-75	15-50	3-18	1.70-1.85	0.2-2	0.07-0.19	0.0-2.9	0.0-1.0	.24	.28		6.6-8.4
Farmington----------	0-2	25-75	15-65	10-27	1.10-1.40	0.6-2	0.11-0.19	0.0-2.9	2.0-6.0	.32	.32	1	5.1-7.3
	2-18	25-75	15-65	10-27	1.20-1.50	0.6-2	0.07-0.18	0.0-2.9	0.0-1.0	.32	.37		5.6-7.8
	18-22	---	---	---	---	0.01-20	---	---	---	---	---		---
40D:													
Galway--------------	0-2	30-50	30-65	7-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-4	30-50	30-65	7-18	1.10-1.40	0.6-2	0.15-0.21	0.0-2.9	2.0-6.0	.32	.32		5.6-7.3
	4-21	30-75	15-65	5-18	1.20-1.50	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	21-32	30-75	15-65	3-18	1.20-1.50	0.6-2	0.04-0.14	0.0-2.9	0.0-1.0	.24	.32		7.4-8.4
	32-36	---	---	---	---	0.01-20	---	---	---	---	---		---
Nellis--------------	0-1	30-75	15-65	5-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-8	30-75	15-65	5-18	1.30-1.60	0.6-2	0.13-0.20	0.0-2.9	2.0-6.0	.32	.32		5.6-7.3
	8-23	30-75	15-65	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.3
	23-31	40-75	15-50	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	31-65	40-75	15-50	3-18	1.70-1.85	0.2-2	0.07-0.19	0.0-2.9	0.0-1.0	.24	.28		6.6-8.4
Farmington----------	0-3	25-75	15-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	3-5	25-75	15-65	10-27	1.10-1.40	0.6-2	0.11-0.19	0.0-2.9	2.0-6.0	.32	.32		5.1-7.3
	5-21	25-75	15-65	10-27	1.20-1.50	0.6-2	0.07-0.18	0.0-2.9	0.0-1.0	.32	.37		5.6-7.8
	21-25	---	---	---	---	0.01-20	---	---	---	---	---		---

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
41C,41D,41E:													
Galway---------------	0-2	30-50	30-65	7-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-4	30-50	30-65	7-18	1.10-1.40	0.6-2	0.09-0.16	0.0-2.9	2.0-6.0	.24	.32		5.6-7.3
	4-21	30-75	15-65	5-18	1.20-1.50	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	21-32	30-75	15-65	3-18	1.20-1.50	0.6-2	0.04-0.14	0.0-2.9	0.0-1.0	.24	.32		7.4-8.4
	32-36	---	---	---	---	0.01-20	---	---	---	---	---		---
Farmington----------	0-3	25-75	15-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	3-5	25-75	15-65	10-27	1.10-1.40	0.6-2	0.11-0.19	0.0-2.9	2.0-6.0	.32	.32		5.1-7.3
	5-21	25-75	15-65	10-27	1.20-1.50	0.6-2	0.07-0.18	0.0-2.9	0.0-1.0	.32	.37		5.6-7.8
	21-25	---	---	---	---	0.01-20	---	---	---	---	---		---
42C:													
Macomber------------	0-2	25-50	30-65	10-27	1.10-1.40	0.6-2	0.10-0.17	0.0-2.9	2.0-6.0	.24	.32	2	4.5-5.5
	2-36	25-50	30-65	10-27	1.20-1.50	0.6-2	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	36-40	---	---	---	---	0.01-20	---	---	---	---	---		---
Taconic-------------	0-2	25-50	30-65	10-27	1.10-1.40	0.6-6	0.10-0.17	0.0-2.9	2.0-6.0	.24	.37	1	4.5-5.5
	2-12	25-50	30-65	10-27	1.10-1.40	0.6-6	0.10-0.17	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	12-16	---	---	---	---	0.01-20	---	---	---	---	---		4.5-5.5
42D,42E:													
Macomber------------	0-1	25-50	30-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	25-50	30-65	10-27	1.10-1.40	0.6-2	0.09-0.15	0.0-2.9	2.0-6.0	.24	.32		4.5-5.5
	3-37	25-50	30-65	10-27	1.20-1.50	0.6-2	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	37-41	---	---	---	---	0.01-20	---	---	---	---	---		---
Taconic-------------	0-1	25-50	30-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-3	25-50	30-65	10-27	1.10-1.40	0.6-6	0.09-0.15	0.0-2.9	2.0-6.0	.24	.37		4.5-5.5
	3-13	25-50	30-65	10-27	1.20-1.50	0.6-6	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	13-17	---	---	---	---	0.01-20	---	---	---	---	---		---
43C,43D,43E:													
Taconic-------------	0-1	25-50	30-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-3	25-50	30-65	10-27	1.10-1.40	0.6-6	0.09-0.15	0.0-2.9	2.0-6.0	.24	.37		4.5-5.5
	3-13	25-50	30-65	10-27	1.20-1.50	0.6-6	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	13-17	---	---	---	---	0.01-20	---	---	---	---	---		---
Macomber------------	0-1	25-50	30-65	10-27	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	25-50	30-65	10-27	1.10-1.40	0.6-2	0.09-0.15	0.0-2.9	2.0-6.0	.24	.32		4.5-5.5
	3-37	25-50	30-65	10-27	1.20-1.50	0.6-2	0.04-0.11	0.0-2.9	0.0-1.0	.24	.32		4.5-5.5
	37-41	---	---	---	---	0.01-20	---	---	---	---	---		---
44B,44C,44D:													
Dutchess------------	0-5	35-50	30-65	4-10	1.00-1.20	0.6-2	0.18-0.22	0.0-2.9	3.0-8.0	.28	.32	5	4.5-6.0
	5-26	35-50	30-65	4-10	1.30-1.50	0.6-2	0.14-0.20	0.0-2.9	0.0-1.0	.37	.43		4.5-6.0
	26-70	35-75	15-65	4-10	1.40-1.60	0.6-2	0.10-0.18	0.0-2.9	0.0-1.0	.32	.37		5.1-6.5

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
47C,47D,47E:													
Dutchess------------	0-2	35-50	30-65	4-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	2-7	35-50	30-65	4-10	1.00-1.20	0.6-2	0.16-0.20	0.0-2.9	3.0-8.0	.28	.32		4.5-6.0
	7-28	35-50	30-65	4-10	1.30-1.50	0.6-2	0.14-0.20	0.0-2.9	0.0-1.0	.37	.43		4.5-6.0
	28-72	35-75	15-65	4-10	1.40-1.60	0.6-2	0.10-0.18	0.0-2.9	0.0-1.0	.32	.43		5.1-6.5
48B,48C,48D:													
Pittstown-----------	0-6	35-75	15-65	2-12	1.00-1.30	0.6-2	0.15-0.20	0.0-2.9	2.0-6.0	.28	.28	3	4.5-6.0
	6-23	35-75	15-65	2-12	1.30-1.60	0.6-2	0.15-0.20	0.0-2.9	0.5-3.0	.37	.43		4.5-6.0
	23-65	30-75	15-65	2-12	1.70-2.00	0.06-0.2	0.10-0.15	0.0-2.9	0.0-1.0	.28	.32		4.5-6.0
49C,49D:													
Pittstown-----------	0-1	35-75	15-65	2-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-6	35-75	15-65	2-12	1.00-1.30	0.6-2	0.15-0.20	0.0-2.9	2.0-6.0	.20	.28		4.5-6.0
	6-23	35-75	15-65	2-12	1.30-1.60	0.6-2	0.15-0.20	0.0-2.9	0.5-3.0	.37	.43		4.5-6.0
	23-65	30-75	15-65	2-12	1.70-2.00	0.06-0.2	0.10-0.15	0.0-2.9	0.0-1.0	.28	.32		4.5-6.0
50B:													
Brayton-------------	0-6	35-75	15-65	4-10	1.00-1.30	0.6-2	0.25-0.35	0.0-2.9	2.0-8.0	.32	.32	2	3.6-6.0
	6-15	35-75	15-65	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37		5.1-6.5
	15-65	35-75	15-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28		5.6-7.3
51B:													
Brayton-------------	0-2	35-75	15-65	4-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-8	35-75	15-65	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28		3.6-6.0
	8-17	35-75	15-65	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37		5.1-6.5
	17-67	35-75	15-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28		5.6-7.3
52A:													
Mansfield-----------	0-2	30-75	15-65	3-20	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-13	30-75	15-65	3-20	1.00-1.30	0.6-2	0.14-0.28	0.0-2.9	2.0-6.0	.20	.28		4.5-6.5
	13-22	35-75	15-65	3-18	1.35-1.60	0.6-2	0.12-0.24	0.0-2.9	0.5-2.0	.37	.37		5.1-7.3
	22-67	35-75	15-65	3-10	1.70-2.00	0.0015-0.2	0.06-0.12	0.0-2.9	0.0-0.5	.24	.28		5.1-7.3
64B,64C,64D:													
Stockbridge---------	0-9	35-75	15-65	5-18	1.00-1.25	0.6-2	0.14-0.24	0.0-2.9	2.0-6.0	.28	.28	3	5.1-7.3
	9-24	35-75	15-65	5-18	1.40-1.65	0.6-2	0.12-0.22	0.0-2.9	0.5-2.0	.37	.43		5.6-7.3
	24-36	35-75	15-65	5-18	1.60-1.85	0.06-0.6	0.08-0.18	0.0-2.9	0.0-0.5	.24	.28		5.6-7.3
	36-65	35-75	15-65	3-18	1.60-1.85	0.06-0.6	0.07-0.17	0.0-2.9	0.0-0.5	.24	.28		5.6-8.4
65C:													
Stockbridge---------	0-1	35-75	15-65	5-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-9	35-75	15-65	5-18	1.00-1.25	0.6-2	0.11-0.21	0.0-2.9	2.0-6.0	.24	.28		5.1-7.3
	9-24	35-75	15-65	5-18	1.40-1.65	0.6-2	0.12-0.22	0.0-2.9	0.5-2.0	.37	.43		5.6-7.3
	24-36	35-75	15-65	5-18	1.60-1.85	0.06-0.6	0.08-0.18	0.0-2.9	0.0-0.5	.24	.28		5.6-7.3
	36-65	35-75	15-65	3-18	1.60-1.85	0.06-0.6	0.07-0.17	0.0-2.9	0.0-0.5	.24	.28		5.6-8.4

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
66A,66B,66C,66D:													
Georgia-------------	0-10	30-50	30-65	7-18	1.00-1.30	0.6-2	0.17-0.24	0.0-2.9	3.0-8.0	.32	.32	3	5.1-7.3
	10-30	30-75	15-65	5-18	1.30-1.60	0.6-2	0.09-0.18	0.0-2.9	0.0-1.0	.32	.37		5.1-7.3
	30-65	30-75	15-65	10-18	1.60-1.80	0.06-0.2	0.08-0.18	0.0-2.9	0.0-0.5	.32	.37		5.1-7.3
67B,67C:													
Georgia-------------	0-1	30-50	30-65	7-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-10	30-50	30-65	7-18	1.00-1.30	0.6-2	0.13-0.22	0.0-2.9	3.0-8.0	.28	.32		5.1-7.3
	10-30	30-75	15-65	5-18	1.30-1.60	0.6-2	0.10-0.22	0.0-2.9	0.0-1.0	.32	.37		5.1-7.3
	30-65	30-75	15-65	10-18	1.60-1.80	0.06-0.2	0.12-0.22	0.0-2.9	0.0-0.5	.32	.37		5.1-7.3
68A,68B:													
Massena-------------	0-8	30-75	15-65	8-22	1.10-1.40	0.6-2	0.14-0.20	0.0-2.9	3.0-8.0	.28	.28	3	5.6-7.3
	8-24	40-75	15-50	7-18	1.20-1.50	0.06-0.6	0.08-0.15	0.0-2.9	0.0-1.0	.20	.24		5.6-7.3
	24-65	40-75	15-50	7-18	1.70-1.95	0.06-0.6	0.06-0.14	0.0-2.9	0.0-0.5	.20	.24		6.6-8.4
69A,69B:													
Massena-------------	0-2	30-75	15-65	8-22	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-10	30-75	15-65	8-22	1.10-1.40	0.6-2	0.08-0.15	0.0-2.9	3.0-8.0	.20	.24		5.6-7.3
	10-26	40-75	15-50	7-18	1.20-1.50	0.06-0.6	0.08-0.15	0.0-2.9	0.0-1.0	.20	.24		5.6-7.3
	26-67	40-75	15-50	7-18	1.70-1.95	0.06-0.6	0.06-0.14	0.0-2.9	0.0-1.0	.20	.24		6.6-8.4
70A,70B,70C,70D,70E:													
Groton--------------	0-8	40-75	15-50	2-8	1.00-1.30	2-20	0.07-0.15	0.0-2.9	1.0-4.0	.17	.20	5	5.6-7.3
	8-14	40-75	15-50	2-6	1.25-1.50	2-20	0.04-0.12	0.0-2.9	0.5-2.0	.17	.24		5.6-7.3
	14-22	60-85	10-40	2-5	1.30-1.60	20-100	0.02-0.10	0.0-2.9	0.0-0.5	.17	.24		5.6-7.8
	22-65	70-100	0-30	0-2	1.40-1.70	20-100	0.01-0.06	0.0-2.9	0.0-0.5	.10	.17		6.6-8.4
71A,71B:													
Hero----------------	0-8	35-75	15-65	3-15	1.10-1.40	0.6-6	0.13-0.22	0.0-2.9	2.0-5.0	.24	.32	3	5.6-7.3
	8-24	35-75	15-65	3-15	1.30-1.55	0.6-6	0.10-0.20	0.0-2.9	0.5-3.0	.24	.28		5.6-7.8
	24-65	70-100	0-30	0-5	1.40-1.70	6-20	0.01-0.06	0.0-2.9	0.0-1.0	.10	.17		7.4-8.4
72A:													
Fredon--------------	0-9	30-75	15-65	7-20	1.20-1.40	0.6-2	0.12-0.16	0.0-2.9	3.0-5.0	.32	.32	3	5.6-7.3
	9-23	30-75	15-65	7-20	1.20-1.40	0.2-2	0.12-0.20	0.0-2.9	0.5-1.0	.32	.37		5.6-7.3
	23-65	75-100	0-25	2-10	1.40-1.60	6-20	0.02-0.06	0.0-2.9	0.0-0.5	.10	.17		5.6-8.4
84B,84C,84D:													
Nellis--------------	0-8	30-75	15-65	5-18	1.30-1.60	0.6-2	0.13-0.20	0.0-2.9	2.0-6.0	.32	.32	3	5.6-7.3
	8-23	30-75	15-65	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.3
	23-31	40-75	15-50	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	31-65	40-75	15-50	3-18	1.70-1.85	0.2-2	0.07-0.19	0.0-2.9	0.0-1.0	.24	.28		6.6-8.4

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Soil reaction
										Kw	Kf	T	pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
85B,85C,85D,85E:													
Nellis--------------	0-1	30-75	15-65	5-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-8	30-75	15-65	5-18	1.30-1.60	0.6-2	0.10-0.19	0.0-2.9	2.0-6.0	.24	.32		5.6-7.3
	8-23	30-75	15-65	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.3
	23-31	40-75	15-50	5-18	1.40-1.70	0.6-2	0.08-0.19	0.0-2.9	0.0-1.0	.24	.28		5.6-7.8
	31-65	40-75	15-50	3-18	1.70-1.85	0.2-2	0.07-0.11	0.0-2.9	0.0-1.0	.24	.28		6.6-8.4
86A,86B,86C:													
Amenia--------------	0-5	30-75	15-65	5-18	1.10-1.40	0.6-2	0.13-0.20	0.0-2.9	2.0-6.0	.32	.32	3	5.6-7.8
	5-23	30-75	15-65	5-18	1.30-1.60	0.6-2	0.08-0.19	0.0-2.9	0.5-2.0	.24	.28		5.6-7.8
	23-65	30-75	15-65	5-18	1.70-1.95	0.06-0.2	0.08-0.12	0.0-2.9	0.0-0.5	.24	.28		7.4-8.4
87B,87C:													
Amenia--------------	0-2	30-75	15-65	5-18	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-7	30-75	15-65	5-18	1.10-1.40	0.6-2	0.09-0.16	0.0-2.9	2.0-6.0	.24	.32		5.6-7.8
	7-25	30-75	15-65	5-18	1.30-1.60	0.6-2	0.08-0.19	0.0-2.9	0.5-2.0	.24	.28		5.6-7.8
	25-65	30-75	15-65	5-18	1.70-1.95	0.06-0.2	0.08-0.12	0.0-2.9	0.0-0.5	.24	.28		7.4-8.4
90C,90D,90E:													
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
93B,93C,93D:													
Pittsfield----------	0-7	40-75	15-50	2-10	1.40-1.60	0.6-6	0.13-0.20	0.0-2.9	2.0-6.0	.24	.24	5	4.5-7.3
	7-29	40-75	15-50	4-14	1.50-1.80	0.6-6	0.11-0.18	0.0-2.9	0.5-3.0	.32	.37		5.1-7.3
	29-65	40-75	15-50	1-10	1.60-1.80	0.6-6	0.09-0.17	0.0-2.9	0.0-1.0	.24	.28		5.6-8.4
94B,94C,94D,94E:													
Pittsfield----------	0-1	40-75	15-50	2-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-7	40-75	15-50	2-10	1.40-1.60	0.6-6	0.11-0.18	0.0-2.9	2.0-6.0	.20	.24		4.5-7.3
	7-29	40-75	15-50	4-14	1.50-1.80	0.6-6	0.11-0.18	0.0-2.9	0.5-3.0	.32	.37		5.1-7.3
	29-65	40-75	15-50	1-10	1.60-1.80	0.6-6	0.09-0.17	0.0-2.9	0.0-1.0	.24	.28		5.6-8.4
95C,95D,95E:													
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0
96D,96F:													
Hogback-------------	0-2	40-75	15-50	3-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	2-6	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	6-17	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.45	0.0-2.9	4.0-8.0	.64	.64		3.6-5.5
	17-21	---	---	---	---	0.01-20	---	---	---	---	---		---

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
96D,96F:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Rock Outcrop--------	0-65	---	---	---	---	0.01-20	0.00-0.00	---	---	---	---	--	---
100B:													
Wilmington----------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-6	35-75	15-65	3-10	0.70-1.00	0.6-2	0.10-0.15	0.0-2.9	4.0-8.0	.43	.43		3.6-6.0
	6-26	35-75	15-65	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-6.0
	26-67	35-75	15-65	3-10	1.80-2.00	0.06-0.6	0.08-0.20	0.0-2.9	0.0-2.0	.37	.43		5.1-6.5
102B,102C:													
Mundal--------------	0-4	40-75	15-50	3-10	0.70-1.00	0.6-2	0.13-0.25	0.0-2.9	4.0-8.0	.49	.49	3	3.6-6.0
	4-23	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	23-65	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5
104B,104C,104E:													
Colton--------------	0-2	70-85	5-30	1-5	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	2-8	70-85	5-30	1-5	1.10-1.40	6-20	0.03-0.07	0.0-2.9	2.0-6.0	.10	.17		3.6-6.0
	8-28	70-100	0-30	0-5	1.25-1.55	6-20	0.02-0.05	0.0-2.9	0.5-2.0	.15	.17		4.5-6.0
	28-67	86-100	0-12	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.5	.10	.17		4.5-6.5
105B,105C,105D,105E:													
Monadnock-----------	0-6	40-75	15-50	1-8	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	6-8	40-75	15-50	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28		3.6-6.0
	8-21	40-75	15-50	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.5-4.5	.28	.32		3.6-6.0
	21-71	70-90	7-30	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-1.0	.17	.24		3.6-6.0
106B,106C,106D,106E:													
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
108B,108C,108D:													
Peru----------------	0-2	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-8	40-75	15-50	3-10	0.80-1.00	0.6-2	0.16-0.24	0.0-2.9	2.0-6.0	.20	.24		3.6-6.0
	8-22	40-75	15-50	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	22-67	40-75	15-50	3-10	1.60-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
109C,109D,109E:													
Tunbridge-----------	0-1	40-75	15-50	5-9	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	40-75	15-50	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24		3.6-6.0
	3-16	40-75	15-50	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	0.5-4.5	.20	.24		3.6-6.0
	16-24	40-75	15-50	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	0.0-1.0	.20	.24		5.1-6.5
	24-28	---	---	---	---	0.01-20	---	---	---	---	---		---
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
111C,111D,111E:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0
112C,112D,112E:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Hogback-------------	0-2	40-75	15-50	3-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	2-6	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	6-17	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.45	0.0-2.9	4.0-8.0	.64	.64		3.6-5.5
	17-21	---	---	---	---	0.01-20	---	---	---	---	---		---
113B:													
Cabot---------------	0-1	35-75	15-65	5-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-9	35-75	15-65	5-12	0.70-1.10	0.6-2	0.14-0.24	0.0-2.9	4.0-12	.28	.32		5.1-7.3
	9-15	35-75	15-65	3-8	1.30-1.70	0.6-2	0.10-0.22	0.0-2.9	0.5-4.0	.28	.32		5.1-7.3
	15-66	35-75	15-65	5-8	1.70-1.90	0.0015-0.2	0.08-0.12	0.0-2.9	0.0-0.5	.28	.32		5.6-7.8
114B,114C,114D:													
Mundal--------------	0-3	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	3-7	40-75	15-50	3-10	0.70-1.00	0.6-2	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	7-26	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	26-68	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
115B,115C,115D:													
Peru----------------	0-6	40-75	15-50	3-10	1.00-1.30	0.6-2	0.14-0.23	0.0-2.9	2.0-6.0	.24	.24	3	4.5-6.0
	6-20	40-75	15-50	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-4.5	.32	.37		4.5-6.0
	20-65	40-75	15-50	3-10	1.60-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-1.0	.24	.28		4.5-6.0
116D,116F:													
Lyman---------------	0-3	35-75	15-65	2-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	3-5	35-75	15-65	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28		3.6-6.0
	5-19	35-75	15-65	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-8.0	.32	.37		3.6-6.0
	19-23	---	---	---	---	0.01-20	---	---	---	---	---		---
Tunbridge-----------	0-1	40-75	15-50	5-9	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	40-75	15-50	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24		3.6-6.0
	3-16	40-75	15-50	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	0.5-4.5	.20	.24		3.6-6.0
	16-24	40-75	15-50	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	0.0-1.0	.20	.24		5.1-6.5
	24-28	---	---	---	---	0.01-20	---	---	---	---	---		---
Rock Outcrop--------	0-65	---	---	---	---	0.01-20	0.00-0.00	---	---	---	---	--	---
117B,117C,117D:													
Berkshire-----------	0-5	40-75	15-50	3-10	1.10-1.15	0.6-6	0.10-0.22	0.0-2.9	2.0-5.0	.24	.24	5	4.5-6.0
	5-30	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		4.5-6.0
	30-65	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		4.5-6.0
118C,118D,118E:													
Tunbridge-----------	0-1	40-75	15-50	5-9	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	40-75	15-50	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24		3.6-6.0
	3-16	40-75	15-50	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	0.5-4.5	.20	.24		3.6-6.0
	16-24	40-75	15-50	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	0.0-1.0	.20	.24		5.1-6.5
	24-28	---	---	---	---	0.01-20	---	---	---	---	---		---
Lyman---------------	0-3	35-75	15-65	2-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	3-5	35-75	15-65	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28		3.6-6.0
	5-19	35-75	15-65	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-8.0	.32	.37		3.6-6.0
	19-23	---	---	---	---	0.01-20	---	---	---	---	---		---
221F:													
Tunbridge-----------	0-1	40-75	15-50	5-9	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	40-75	15-50	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24		3.6-6.0
	3-16	40-75	15-50	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	0.5-4.5	.20	.24		3.6-6.0
	16-24	40-75	15-50	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	0.5-1.0	.20	.24		5.1-6.5
	24-28	---	---	---	---	0.01-20	---	---	---	---	---		---

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
221F:													
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
403B:													
Cabot---------------	0-1	35-75	15-65	5-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-9	35-75	15-65	5-12	0.70-1.10	0.6-2	0.14-0.24	0.0-2.9	4.0-12	.28	.32		5.1-7.3
	9-15	35-75	15-65	3-8	1.30-1.70	0.6-2	0.10-0.22	0.0-2.9	0.5-4.0	.28	.32		5.1-7.3
	15-66	35-75	15-65	5-8	1.70-1.90	0.0015-0.2	0.08-0.12	0.0-2.9	0.0-1.0	.28	.32		5.6-7.8
Carlisle------------	0-1	---	---	---	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	1-65	---	---	---	0.13-0.23	0.2-6	0.35-0.45	---	70-100	---	---		4.5-7.3
405D:													
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
Tunbridge-----------	0-1	40-75	15-50	5-9	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-3	40-75	15-50	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24		3.6-6.0
	3-16	40-75	15-50	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	0.5-4.5	.20	.24		3.6-6.0
	16-24	40-75	15-50	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	0.0-1.0	.20	.24		5.1-6.5
	24-28	---	---	---	---	0.01-20	---	---	---	---	---		---
413D:													
Peru----------------	0-2	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-8	40-75	15-50	3-10	0.80-1.00	0.6-2	0.16-0.24	0.0-2.9	2.0-6.0	.20	.24		3.6-6.0
	8-22	40-75	15-50	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	22-67	40-75	15-50	3-10	1.60-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
Berkshire-----------	0-1	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	5	3.6-5.5
	1-6	40-75	15-50	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24		3.6-6.0
	6-31	40-75	15-50	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-4.5	.32	.37		3.6-6.0
	31-66	40-75	15-50	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.28		3.6-6.0
Cabot---------------	0-1	35-75	15-65	5-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	1-9	35-75	15-65	5-12	0.70-1.10	0.6-2	0.14-0.24	0.0-2.9	4.0-12	.28	.32		5.1-7.3
	9-15	35-75	15-65	3-8	1.30-1.70	0.6-2	0.10-0.22	0.0-2.9	0.5-4.0	.28	.32		5.1-7.3
	15-66	35-75	15-65	5-8	1.70-1.90	0.0015-0.2	0.08-0.12	0.0-2.9	0.0-1.0	.28	.32		5.6-7.8

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Soil reaction pH
										Kw	Kf	T	
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
702E:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Hogback-------------	0-2	40-75	15-50	3-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	2-6	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	6-17	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.45	0.0-2.9	4.0-8.0	.64	.64		3.6-5.5
	17-21	---	---	---	---	0.01-20	---	---	---	---	---		---
703C:													
Mundal--------------	0-3	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	3-7	40-75	15-50	3-10	0.70-1.00	0.6-2	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	7-26	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	26-68	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0
705D:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0
Mundal--------------	0-3	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	3-7	40-75	15-50	3-10	0.70-1.00	0.6-2	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	7-26	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	26-68	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5
715D:													
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
715D:													
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
902F:													
Hogback-------------	0-2	40-75	15-50	3-12	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	2-6	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	6-17	40-75	15-50	3-12	0.60-1.00	0.6-6	0.13-0.45	0.0-2.9	4.0-8.0	.64	.64		3.6-5.5
	17-21	---	---	---	---	0.01-20	---	---	---	---	---		---
Rawsonville---------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	2-3	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-5.5
	3-20	35-75	15-65	3-10	0.70-1.00	0.6-6	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-5.5
	20-25	35-75	15-65	3-10	0.80-1.10	0.6-6	0.07-0.17	0.0-2.9	2.0-6.0	.28	.32		3.6-5.5
	25-29	---	---	---	---	0.01-20	---	---	---	---	---		---
Rock Outcrop--------	0-65	---	---	---	---	0.01-20	0.00-0.00	---	---	---	---	--	---
903C:													
Mundal--------------	0-3	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	3-7	40-75	15-50	3-10	0.70-1.00	0.6-2	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	7-26	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	26-68	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5
Wilmington----------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-6	35-75	15-65	3-10	0.70-1.00	0.6-2	0.10-0.15	0.0-2.9	4.0-8.0	.43	.43		3.6-6.0
	6-26	35-75	15-65	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-6.0
	26-67	35-75	15-65	3-10	1.80-2.00	0.06-0.6	0.08-0.20	0.0-2.9	0.0-2.0	.37	.43		5.1-6.5
905D:													
Houghtonville-------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-4	35-75	15-65	3-10	0.70-1.00	0.6-6	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	4-37	35-75	15-65	3-10	0.80-1.10	0.6-6	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	37-67	35-75	15-65	3-10	1.50-1.80	0.6-6	0.08-0.15	0.0-2.9	0.5-2.0	.28	.32		3.6-6.0
Monadnock-----------	0-6	40-75	15-50	1-8	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	6-8	40-75	15-50	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28		3.6-6.0
	8-21	40-75	15-50	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.5-4.5	.28	.32		3.6-6.0
	21-71	70-90	7-30	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-1.0	.17	.24		3.6-6.0
913E:													
Glebe---------------	0-3	35-75	15-65	1-7	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	2	3.6-5.5
	3-11	35-75	15-65	1-7	0.80-1.00	2-6	0.15-0.19	0.0-2.9	8.0-20	.43	.55		3.6-5.5
	11-28	35-75	15-65	1-12	0.60-1.00	2-6	0.35-0.45	0.0-2.9	5.0-20	.64	.64		3.6-5.5
	28-32	---	---	---	---	0.01-20	---	---	---	---	---		---

Table 15.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Soil reaction pH
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct				
913E:													
Stratton------------	0-1	35-75	15-65	1-7	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	1	3.6-5.5
	1-7	35-75	15-65	1-7	0.80-1.50	0.6-6	0.15-0.22	0.0-2.9	8.0-20	.43	.49		3.6-5.5
	7-15	35-75	15-65	1-12	0.60-1.10	0.6-6	0.14-0.45	0.0-2.9	5.0-20	.64	.64		3.6-5.5
	15-20	35-75	15-65	1-10	0.70-1.10	0.6-6	0.10-0.35	0.0-2.9	5.0-20	.49	.64		3.6-5.5
	20-24	---	---	---	---	0.01-20	---	---	---	---	---		---
923B:													
Wilmington----------	0-2	35-75	15-65	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	2-6	35-75	15-65	3-10	0.70-1.00	0.6-2	0.10-0.15	0.0-2.9	4.0-8.0	.43	.43		3.6-6.0
	6-26	35-75	15-65	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-8.0	.64	.64		3.6-6.0
	26-67	35-75	15-65	3-10	1.80-2.00	0.06-0.6	0.08-0.20	0.0-2.9	0.0-2.0	.37	.43		5.1-6.5
Mundal--------------	0-3	40-75	15-50	3-10	0.07-0.60	2-6	0.35-0.65	---	25-100	---	---	3	3.6-5.5
	3-7	40-75	15-50	3-10	0.70-1.00	0.6-2	0.10-0.22	0.0-2.9	4.0-8.0	.43	.49		3.6-6.0
	7-26	40-75	15-50	3-10	0.80-1.10	0.6-2	0.13-0.45	0.0-2.9	2.0-6.0	.64	.64		3.6-6.0
	26-68	40-75	15-50	3-10	1.80-2.00	0.06-0.6	0.06-0.10	0.0-2.9	0.5-2.0	.37	.43		5.1-6.5

Table 16.—Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
3A:									
Copake	---	---	---	---	---	---	Moderate	Low	Moderate
3B:									
Copake	---	---	---	---	---	---	Moderate	Low	Moderate
3C:									
Copake	---	---	---	---	---	---	Moderate	Low	Moderate
3D:									
Copake	---	---	---	---	---	---	Moderate	Low	Moderate
3E:									
Copake	---	---	---	---	---	---	Moderate	Low	Moderate
9:									
Pits	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
Dumps	---	---	---	---	---	---	None	---	---
10D:									
Glebe	Bedrock (lithic)	20-40	---	Indurated	---	---	High	High	High
Stratton	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
Londonderry	Bedrock (lithic)	2-10	---	Indurated	---	---	Moderate	High	High
10E:									
Glebe	Bedrock (lithic)	20-40	---	Indurated	---	---	High	High	High
Stratton	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
Londonderry	Bedrock (lithic)	2-10	---	Indurated	---	---	Moderate	High	High
11F:									
Taconic	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Hubbardton	Bedrock (lithic)	2-10	---	Indurated	---	---	Moderate	Low	High
Rock outcrop	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
18B:									
Windsor	---	---	---	---	---	---	Low	Low	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In			
18C:									
Windsor----------------	---	---	---	---	---	---	Low	Low	High
18E:									
Windsor----------------	---	---	---	---	---	---	Low	Low	High
21A:									
Limerick---------------	---	---	---	---	---	---	High	High	Low
23A:									
Adrian-----------------	---	---	---	---	6-18	29-33	High	High	Moderate
Saco-------------------	---	---	---	---	---	---	High	Low	Moderate
24A:									
Carlisle---------------	---	---	---	---	---	43-54	High	High	Low
25B:									
Belgrade---------------	---	---	---	---	---	---	High	Moderate	Moderate
26A:									
Raynham----------------	---	---	---	---	---	---	High	High	Moderate
27B:									
Udipsamments-----------	---	---	---	---	---	---	Low	---	---
Udorthents-------------	---	---	---	---	---	---	Moderate	---	---
28A:									
Udifluvents------------	---	---	---	---	---	---	Moderate	---	---
29A:									
Occum------------------	---	---	---	---	---	---	Moderate	Low	Moderate
34A:									
Pootatuck--------------	---	---	---	---	---	---	Moderate	Moderate	Moderate
35B:									
Hartland---------------	---	---	---	---	---	---	High	Low	Moderate
40B:									
Galway-----------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Nellis-----------------	---	---	---	---	---	---	Moderate	Low	Low
Farmington-------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
40C:									
Galway	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Nellis	---	---	---	---	---	---	Moderate	Low	Low
Farmington	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate
40D:									
Galway	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Nellis	---	---	---	---	---	---	Moderate	Low	Low
Farmington	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate
41C:									
Galway	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Farmington	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate
41D:									
Galway	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Farmington	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate
41E:									
Galway	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	Low
Farmington	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	Moderate
42C:									
Macomber	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
Taconic	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
42D:									
Macomber	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
Taconic	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
42E:									
Macomber	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
Taconic	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
43C:									
Taconic----------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Macomber---------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
43D:									
Taconic----------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Macomber---------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
43E:									
Taconic----------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Macomber---------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	Low	High
44B:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
44C:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
44D:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
47C:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
47D:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
47E:									
Dutchess---------------	---	---	---	---	---	---	Moderate	Low	Moderate
48B:									
Pittstown--------------	Dense material	18-30	---	Noncemented	---	---	Moderate	Moderate	High
48C:									
Pittstown--------------	Dense material	18-30	---	Noncemented	---	---	Moderate	Moderate	High
48D:									
Pittstown--------------	Dense material	18-30	---	Noncemented	---	---	Moderate	Moderate	High
49C:									
Pittstown--------------	Dense material	18-30	---	Noncemented	---	---	Moderate	Moderate	High
49D:									
Pittstown--------------	Dense material	18-30	---	Noncemented	---	---	Moderate	Moderate	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
50B:									
Brayton	Dense material	10-27	---	Noncemented	---	---	High	High	Moderate
51B:									
Brayton	Dense material	10-27	---	Noncemented	---	---	High	High	Moderate
52A:									
Mansfield	Dense material	14-36	---	Noncemented	---	---	High	Low	High
64B:									
Stockbridge	---	---	---	---	---	---	Moderate	Moderate	Low
64C:									
Stockbridge	---	---	---	---	---	---	Moderate	Moderate	Low
64D:									
Stockbridge	---	---	---	---	---	---	Moderate	Moderate	Low
65C:									
Stockbridge	---	---	---	---	---	---	Moderate	Moderate	Low
65D:									
Stockbridge	---	---	---	---	---	---	Moderate	Moderate	Low
66A:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
66B:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
66C:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
66D:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
67B:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
67C:									
Georgia	---	---	---	---	---	---	Moderate	Moderate	Moderate
68A:									
Massena	---	---	---	---	---	---	High	Moderate	Moderate
68B:									
Massena	---	---	---	---	---	---	High	Moderate	Moderate

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
69A:									
Massena	---	---	---	---	---	---	High	Moderate	Moderate
69B:									
Massena	---	---	---	---	---	---	High	Moderate	Moderate
70A:									
Groton	---	---	---	---	---	---	Low	Low	Low
70B:									
Groton	---	---	---	---	---	---	Low	Low	Low
70C:									
Groton	---	---	---	---	---	---	Low	Low	Low
70D:									
Groton	---	---	---	---	---	---	Low	Low	Low
70E:									
Groton	---	---	---	---	---	---	Low	Low	Low
71A:									
Hero	---	---	---	---	---	---	High	Moderate	Low
71B:									
Hero	---	---	---	---	---	---	High	Moderate	Low
72A:									
Fredon	---	---	---	---	---	---	High	Low	Low
84B:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
84C:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
84D:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
85B:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
85C:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
85D:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
85E:									
Nellis	---	---	---	---	---	---	Moderate	Low	Low
86A:									
Amenia	---	---	---	---	---	---	Moderate	Moderate	Low
86B:									
Amenia	---	---	---	---	---	---	Moderate	Moderate	Low
86C:									
Amenia	---	---	---	---	---	---	Moderate	Moderate	Low
87B:									
Amenia	---	---	---	---	---	---	Moderate	Moderate	Low
87C:									
Amenia	---	---	---	---	---	---	Moderate	Moderate	Low
90C:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
90E:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
93B:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
93C:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
93D:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
94B:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
94C:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
94D:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
94E:									
Pittsfield	---	---	---	---	---	---	Moderate	Low	Low
95C:									
Houghtonville	---	---	---	---	---	---	Moderate	High	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In			
95D:									
Houghtonville----------	---	---	---	---	---	---	Moderate	High	High
95E:									
Houghtonville----------	---	---	---	---	---	---	Moderate	High	High
96D:									
Hogback----------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
Rawsonville------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Rock outcrop-----------	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
96F:									
Hogback----------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
Rawsonville------------	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Rock outcrop-----------	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
100B:									
Wilmington-------------	Dense material	12-24	---	Noncemented	---	---	High	High	High
102B:									
Mundal-----------------	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
102C:									
Mundal-----------------	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
104B:									
Colton-----------------	---	---	---	---	---	---	Low	Low	High
104C:									
Colton-----------------	---	---	---	---	---	---	Low	Low	High
104E:									
Colton-----------------	---	---	---	---	---	---	Low	Low	High
105B:									
Monadnock--------------	---	---	---	---	---	---	Low	Low	High
105C:									
Monadnock--------------	---	---	---	---	---	---	Low	Low	High
105D:									
Monadnock--------------	---	---	---	---	---	---	Low	Low	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
105E:									
Monadnock	---	---	---	---	---	---	Low	Low	High
106B:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
106C:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
106D:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
106E:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
108B:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
108C:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
108D:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
109C:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Berkshire	---	---	---	---	---	---	Moderate	Low	High
109D:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Berkshire	---	---	---	---	---	---	Moderate	Low	High
109E:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Berkshire	---	---	---	---	---	---	Moderate	Low	High
111C:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Houghtonville	---	---	---	---	---	---	Moderate	High	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
111D:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Houghtonville	---	---	---	---	---	---	Moderate	High	High
111E:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Houghtonville	---	---	---	---	---	---	Moderate	High	High
112C:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Hogback	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
112D:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Hogback	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
112E:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Hogback	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
113B:									
Cabot	Dense material	12-20	---	Noncemented	---	---	High	High	Moderate
114B:									
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
114C:									
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
114D:									
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
115B:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
115C:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
115D:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
116D:									
Lyman	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Rock outcrop	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
116F:									
Lyman	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Rock outcrop	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
117B:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
117C:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
117D:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
118C:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Lyman	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
118D:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Lyman	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
118E:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Lyman	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	Low	High
221F:									
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Berkshire	---	---	---	---	---	---	Moderate	Low	High
403B:									
Cabot	Dense material	12-20	---	Noncemented	---	---	High	High	Moderate
Carlisle	---	---	---	---	---	43-54	High	High	Low

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
405D:									
Berkshire	---	---	---	---	---	---	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
413D:									
Peru	Dense material	18-36	---	Noncemented	---	---	High	Moderate	Moderate
Berkshire	---	---	---	---	---	---	Moderate	Low	High
Cabot	Dense material	12-20	---	Noncemented	---	---	High	High	Moderate
702E:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Hogback	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
703C:									
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
Houghtonville	---	---	---	---	---	---	Moderate	High	High
705D:									
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Houghtonville	---	---	---	---	---	---	Moderate	High	High
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
715D:									
Houghtonville	---	---	---	---	---	---	Moderate	High	High
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
902F:									
Hogback	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
Rawsonville	Bedrock (lithic)	20-40	---	Indurated	---	---	Moderate	High	High
Rock outcrop	Bedrock (lithic)	0-0	---	Indurated	---	---	None	---	---
903C:									
Mundal	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
Wilmington	Dense material	12-24	---	Noncemented	---	---	High	High	High

Table 16.—Soil Features—Continue

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
905D:									
Houghtonville----------	---	---	---	---	---	---	Moderate	High	High
Monadnock--------------	---	---	---	---	---	---	Low	Low	High
913E:									
Glebe------------------	Bedrock (lithic)	20-40	---	Indurated	---	---	High	High	High
Stratton---------------	Bedrock (lithic)	10-20	---	Indurated	---	---	Moderate	High	High
923B:									
Wilmington-------------	Dense material	12-24	---	Noncemented	---	---	High	High	High
Mundal-----------------	Dense material	20-30	---	Noncemented	---	---	Moderate	High	High
W:									
Water------------------	---	---	---	---	---	---	---	---	---

Table 17.—Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
3A:										
Copake	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
3B:										
Copake	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
3C:										
Copake	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
3D:										
Copake	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
3E:										
Copake	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
9:										
Pits	---	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Dumps	---	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
10D:										
Glebe	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Stratton	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Londonderry	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
10E:										
Glebe	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Stratton	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Londonderry	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
11F:										
Taconic	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hubbardton	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
18B:										
Windsor	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
18C:										
Windsor----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
18E:										
Windsor----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
21A:										
Limerick---------	C	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	0.0-1.5	>6.0	Apparent	---	---	None	Brief	Frequent
23A:										
Adrian-----------	D	Jan-Dec	0.0-0.5	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
Saco-------------	D	Jan-May	0.0-0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jun	0.0-0.5	>6.0	Apparent	---	---	None	---	None
		Jul-Aug	0.0-2.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.0-0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-0.5	>6.0	Apparent	---	---	None	Brief	Frequent
24A:										
Carlisle---------	D	Jan-Dec	0.0-0.5	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
25B:										
Belgrade---------	B	Jan-Apr	1.3-3.0	>6.0	Apparent	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-3.0	>6.0	Apparent	---	---	None	---	None
26A:										
Raynham----------	C	Jan-May	0.0-2.0	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	0.0-2.0	>6.0	Apparent	---	---	None	---	None
27B:										
Udipsamments-----	---	Jan-Dec	1.5-6.0	>6.0	Apparent	---	---	None	---	None
Udorthents-------	---	Jan-Dec	1.5-6.0	>6.0	Apparent	---	---	None	---	None
28A:										
Udifluvents------	---	Jan-Dec	0.5-6.0	>6.0	Apparent	---	---	None	Brief	Frequent

Table 17.—Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
29A:										
Occum-----------	B	Jan	4.0-6.0	>6.0	Apparent	---	---	None	---	None
		Feb-Apr	4.0-6.0	>6.0	Apparent	---	---	None	Brief	Frequent
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	4.0-6.0	>6.0	Apparent	---	---	None	---	None
34A:										
Pootatuck-------	B	Jan-Apr	1.3-2.5	>6.0	Apparent	---	---	None	Brief	Frequent
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	>6.0	Apparent	---	---	None	Brief	Frequent
35B:										
Hartland--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
40B:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
40C:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
40D:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
41C:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
41D:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
41E:										
Galway----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Farmington------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
42C:										
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
42D:										
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
42E:										
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
43C:										
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
43D:										
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
43E:										
Taconic---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Macomber--------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44B:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44C:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44D:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
47C:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
47D:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
47E:										
Dutchess--------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
48B:										
Pittstown-------	C	Jan-Apr	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
48C:										
Pittstown-------	C	Jan-Apr	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
48D:										
Pittstown-------	C	Jan-Apr	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
49C:										
Pittstown-------	C	Jan-Apr	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
49D:										
Pittstown-------	C	Jan-Apr	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.0	1.5-2.5	Perched	---	---	None	---	None
50B:										
Brayton---------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
51B:										
Brayton---------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
52A:										
Mansfield-------	D	Jan-Jun	0.0-0.5	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jul-Sep	0.0-2.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-0.5	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
64B:										
Stockbridge-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
64C:										
Stockbridge-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
64D:										
Stockbridge-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
65C:										
Stockbridge-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
65D:										
Stockbridge-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
66A:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
66B:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
66C:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
66D:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
67B:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
67C:										
Georgia---------	C	Jan-May	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.2-2.5	1.3-2.7	Perched	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
68A:										
Massena----------	C	Jan-May	1.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.0-1.5	>6.0	Apparent	---	---	None	---	None
68B:										
Massena----------	C	Jan-May	1.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.0-1.5	>6.0	Apparent	---	---	None	---	None
69A:										
Massena----------	C	Jan-May	1.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.0-1.5	>6.0	Apparent	---	---	None	---	None
69B:										
Massena----------	C	Jan-May	1.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.0-1.5	>6.0	Apparent	---	---	None	---	None
70A:										
Groton-----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
70B:										
Groton-----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
70C:										
Groton-----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
70D:										
Groton-----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
70E:										
Groton-----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
71A:										
Hero-------------	B	Jan-Apr	1.5-2.5	>6.0	Apparent	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.5-2.5	>6.0	Apparent	---	---	None	---	None
71B:										
Hero-------------	B	Jan-Apr	1.5-2.5	>6.0	Apparent	---	---	None	---	None
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.5-2.5	>6.0	Apparent	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
72A:										
Fredon----------	C	Jan-Apr	0.5-1.5	>6.0	Apparent	---	---	None	Brief	Rare
		May-Jun	0.5-1.5	>6.0	Apparent	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Dec	0.5-1.5	>6.0	Apparent	---	---	None	---	None
84B:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
84C:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
84D:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
85B:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
85C:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
85D:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
85E:										
Nellis----------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
86A:										
Amenia----------	C	Jan-May	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
86B:										
Amenia----------	C	Jan-May	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
86C:										
Amenia----------	C	Jan-May	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
87B:										
Amenia----------	C	Jan-May	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
87C:										
Amenia----------	C	Jan-May	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.5	1.5-3.0	Perched	---	---	None	---	None
90C:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
90E:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
93B:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
93C:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
93D:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
94B:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
94C:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
94D:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
94E:										
Pittsfield------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
95C:										
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
95D:										
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
95E:										
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
96D:										
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
Rock Outcrop----	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
96F:										
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock Outcrop----	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
100B:										
Wilmington------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
102B:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
102C:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
104B:										
Colton----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
104C:										
Colton----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
104E:										
Colton----------	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
105B:										
Monadnock-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
105C:										
Monadnock-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
105D:										
Monadnock-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
105E:										
Monadnock-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
106B:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
106C:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
106D:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
106E:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
108B:										
Peru------------	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
108C:										
Peru------------	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
108D:										
Peru------------	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
109C:										
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
109D:										
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
109E:										
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
111C:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
111D:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
111E:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
112C:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
112D:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
112E:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
113B:										
Cabot-----------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
114B:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
114C:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
114D:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
115B:										
Peru	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
115C:										
Peru	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
115D:										
Peru	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
116D:										
Lyman	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
116F:										
Lyman	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
117B:										
Berkshire	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
117C:										
Berkshire	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
117D:										
Berkshire	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
118C:										
Tunbridge	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Lyman	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
118D:										
Tunbridge	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
Lyman-----------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
118E:										
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Lyman-----------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
221F:										
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
403B:										
Cabot-----------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
Carlisle--------	D	Jan-Dec	0.0-0.5	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
405D:										
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunbridge-------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
413D:										
Peru------------	C	Jan-May	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	1.3-2.3	1.5-2.5	Perched	---	---	None	---	None
Berkshire-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cabot-----------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
702E:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
703C:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
705D:										
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
715D:										
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
902F:										
Hogback---------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rawsonville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock Outcrop----	D	Jan-Dec	>6.0	>6.0	---	---	---	---	---	None
903C:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
Wilmington------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None
905D:										
Houghtonville---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Monadnock-------	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
913E:										
Glebe-----------	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Stratton--------	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
923B:										
Wilmington------	D	Jan-May	0.0-1.5	>6.0	Apparent	---	---	None	---	None
		Jun-Sep	1.5-3.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0-1.5	>6.0	Apparent	---	---	None	---	None

Table 17.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Water table: Kind	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
923B:										
Mundal----------	C	Jan-May	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.5-2.3	1.7-2.5	Perched	---	---	None	---	None
W:										
Water-----------	---	Jan-Dec	>6.0	>6.0	---	---	---	---	---	---

Table 18.—Classification of the Soils

Soil name	Family or higher taxonomic class
Adrian	Sandy or sandy-skeletal, mixed, euic, mesic Terric Medisaprists
Amenia	Coarse-loamy, mixed, mesic Aquic Eutrochrepts
Belgrade	Coarse-silty, mixed, mesic Aquic Dystric Eutrochrepts
Berkshire	Coarse-loamy, mixed, frigid Typic Haplorthods
Brayton	Coarse-loamy, mixed, nonacid, frigid Aeric Haplaquepts
Cabot	Coarse-loamy, mixed, nonacid, frigid Typic Humaquepts
Carlisle	Euic, mesic Typic Medisaprists
Colton	Sandy-skeletal, mixed, frigid Typic Haplorthods
Copake	Coarse-loamy over sandy or sandy-skeletal, mixed, mesic Dystric Eutrochrepts
Dutchess	Coarse-loamy, mixed, mesic Typic Dystrochrepts
Farmington	Loamy, mixed, mesic Lithic Eutrochrepts
Fredon	Coarse-loamy over sandy or sandy-skeletal, mixed, nonacid, mesic Aeric Haplaquepts
Galway	Coarse-loamy, mixed, mesic Typic Eutrochrepts
Georgia	Coarse-loamy, mixed, mesic Aquic Dystric Eutrochrepts
Glebe	Thixotropic Humic Cryorthods
Groton	Sandy-skeletal, mixed, mesic Typic Eutrochrepts
Hartland	Coarse-silty, mixed, mesic Dystric Eutrochrepts
Hero	Coarse-loamy over sandy or sandy-skeletal, mixed, mesic Aquic Eutrochrepts
Hogback	Loamy, mixed, frigid Lithic Haplorthods
Houghtonville	Coarse-loamy, mixed, frigid Typic Haplorthods
Hubbardton	Loamy-skeletal, mixed, acid, frigid Lithic Udorthents
Limerick	Coarse-silty, mixed, nonacid, mesic Typic Fluvaquents
Londonderry	Thixotropic-skeletal Humic Lithic Cryorthods
Lyman	Loamy, mixed, frigid Lithic Haplorthods
Macomber	Loamy-skeletal, mixed, frigid Typic Dystrochrepts
Mansfield	Coarse-loamy, mixed, nonacid, mesic Typic Humaquepts
Massena	Coarse-loamy, mixed, nonacid, mesic Aeric Haplaquepts
Monadnock	Coarse-loamy over sandy or sandy-skeletal, mixed, frigid Typic Haplorthods
Mundal	Coarse-loamy, mixed, frigid Typic Haplorthods
Nellis	Coarse-loamy, mixed, mesic Typic Eutrochrepts
Occum	Coarse-loamy, mixed, mesic Fluventic Dystrochrepts
Peru	Coarse-loamy, mixed, frigid Aquic Haplorthods
Pittsfield	Coarse-loamy, mixed, mesic Dystric Eutrochrepts
Pittstown	Coarse-loamy, mixed, mesic Aquic Dystrochrepts
Pootatuck	Coarse-loamy, mixed, mesic Fluvaquentic Dystrochrepts
Rawsonville	Coarse-loamy, mixed, frigid Typic Haplorthods
Raynham	Coarse-silty, mixed, nonacid, mesic Aeric Haplaquepts
Saco	Coarse-silty, mixed, nonacid, mesic Fluvaquentic Humaquepts
Stockbridge	Coarse-loamy, mixed, mesic Dystric Eutrochrepts
Stratton	Thixotropic over loamy-skeletal, mixed Humic Cryorthods
Taconic	Loamy-skeletal, mixed, frigid Lithic Dystrochrepts
Tunbridge	Coarse-loamy, mixed, frigid Typic Haplorthods
Udifluvents	Udifluvents
Udipsamments	Udipsamments
Udorthents	Udorthents
Wilmington	Coarse-loamy, mixed, frigid Typic Haplaquods
Windsor	Mixed, mesic Typic Udipsamments

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