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In cooperation with the Fairbanks Soil and Water Conservation District: Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

Soil Survey of Greater Fairbanks Area, Alaska



How To Use This Soil Survey

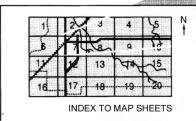
Detailed Soil Maps

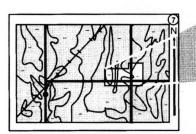
The detailed soil maps can be useful in planning the use and management of small areas.

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.

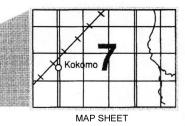
Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

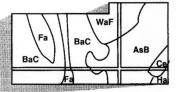
The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.





MAP SHEET





AREA OF INTEREST NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters. 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 and Forestry Experiment Station, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this survey began in 1996 and was completed in 2000. Unless otherwise indicated, statements in this publication refer to conditions in the Survey Area in 2000. This survey was made for the Greater Fairbanks Area, Alaska by the Natural Resources Conservation Service; the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover: A typical landscape in the Greater Fairbanks Area. Mine tailings are in the foreground with Minto, Fairbanks, and Steese soils on the hills in the background.

Additional information about the nation's natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is http://www.nrcs.usda.gov.

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Foreword

This soil survey contains information that can be used in land-planning programs in the Greater Fairbanks Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, 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, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Government agencies, community officials, Alaska Native tribes, 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 on 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 or to permafrost. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

Many soil properties that affect land use are described in this soil survey. 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 is available at the Fairbanks office of the Natural Resources Conservation Service or Alaska Cooperative Extension.

Shirley Gammon State Conservationist Natural Resources Conservation Service

Soil Survey of the Greater Fairbanks Area, Alaska

By Dennis Mulligan, Natural Resources Conservation Service

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Fairbanks Soil and Water Conservation District; Alaska Department of Natural Resources, Division of Agriculture, Division of Forestry, Division of Geological and Geophysical Surveys, and Division of Land; Fairbanks North Star Borough; Tanana Chiefs Conference, Inc.; City of Fairbanks; U.S. Army Corps of Engineers, Chena Lakes Flood Control Project; Alaska Cooperative Extension; and the University of Alaska Fairbanks, Agricultural and Forestry Experiment Station

General Nature of the Survey Area

The Greater Fairbanks Area is in the interior of Alaska (Figure 1). The survey area is approximately 257,703 acres (104,370 h) in size. The population center of the survey area is the city of Fairbanks, which is also the commercial hub of interior and northern Alaska and the second largest city in the state.

The Greater Fairbanks Area lies within two Major Land Resource Areas: the Interior Alaska Highlands and the Interior Alaska Lowlands. The Interior Alaska Lowlands portion of the survey area includes the broad, level flood plain that boarders the Tanana River and its main tributary in this area, the Chena River. Riverine features dominate the landscape and include meandering streams, sloughs, and oxbow lakes. The Interior Alaska Highlands portion of the survey area consists mostly of low mountains and dissected hills interrupted by flat-bottomed valleys. Slopes are generally steep. Usually, gently sloping alluvial fans lie between the Highlands' hills and the Lowlands' flood plain, but in many places the transition between the level flood plain and steep hills is abrupt.

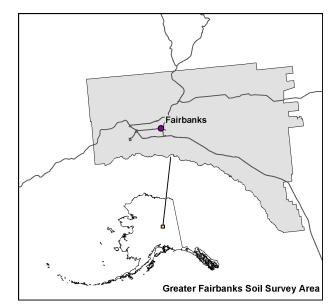


Figure 1.—Location of Greater Faribanks Area in Alaska.

Geology

The Tanana River valley is a structural basin between the Alaska Range on the south and the

Interior Alaska Highlands on the north. Much of the floor of this basin is below sea level and covered by 330 to almost 660 feet (100 to almost 200 m) of Quaternary fluvial and glaciofluvial sediments primarily from the Alaska Range. The history of these deposits relate to glacial advances from Illinoian to Wisconsin times. The glaciofluvial sand and gravel are covered with finer sediments and organic material of varying thickness. These deposits are saturated with water, in most places below the depth of observation for this survey (6 ft. or 2 m) but occasionally within a foot or two of the surface. Permafrost is present in the basin and covers approximately one-third to one-half of the area. Elevations in the Tanana River valley range from about 400 to 475 feet (121 to 144 m) above sea level.

Elevations in the Interior Alaska Highlands range from about 450 to 2,006 feet (136 to 610 m). Geologic materials consist of weathered bedrock covered with windblown silt (loess). The predominant bedrock in the area is highly deformed Paleozoic and Precambrian schist. The schist is highly weathered and fractured near the surface with local intrusions of igneous rocks that are mainly granite, quartz, diorite, and basalt. The loess is only about a foot or two thick (< 1 m) on most hilltops and upper slopes. It may be many feet thick on hills nearest the Tanana River and on the lower slopes of hills elsewhere where the loess has been eroded from the hillsides and has accumulated on lower slopes and in narrow upland valleys. Permafrost is present on lower slopes, valley bottoms, and northfacing slopes. Large bodies of ground ice are present in the thick silty deposits on lower slopes and valley bottoms. Periglacial features such as pingos, thermokarst pits and mounds, ice wedge polygons, and beaded streams dominate these lower slopes and upland valleys.

Climate

The survey area has a continental subarctic climate with long, cold winters and short, warm summers. Summer (June, July, and August) temperatures average 58 degrees F (15 degrees C). Winter (November through March) temperatures average 0.5 degree F (-18 degrees C). Extreme summer temperatures may exceed 90 degrees F (32 degrees C) while extreme winter temperatures may dip below -60 degrees F (-51 degrees C). The average annual precipitation is 12 inches (30 cm), with July and August on average the wettest months and April the driest. Snow covers the ground continuously from October to late April or early May. Tables 1, 2, and 3 give a detailed summary of climatic data.

Forestry

The forest types in the Greater Fairbanks Area are a mosaic of patterns related to fire history, slope and aspect, and the presence or absence of permafrost. Forest stands are classified by the dominant species, but most are a mixture of two or more species.

The forest vegetation pattern of this area is complex. Forests of white spruce, paper birch, and aspen dominate lower slopes and most south-facing slopes. Black spruce forests typically grow at higher elevations on north-facing slopes and at lower elevations in areas where drainage is impeded.

The white spruce forests of interior Alaska are the best developed and most productive forests of this region. They have a minor component of paper birch and balsam poplar and, on the best sites, trees will be 98 feet (30 m) in height and 35 inches (90 cm) in diameter. Tree densities may be as high as 9,800 to 12,000 per acre (4,000 to 5,000/h) in younger stands but are typically between 1,400 and 2,400 per acre (600 and 1,000/h) in older stands. Where the canopy is closed an alder and willow shrub laver can be found. Common smaller shrubs found in the white spruce forests are bog blueberry, crowberry, lingonberry, Labrador tea, and dwarf birch. White spruce forests can regenerate after a fire but often are the result of a successional change from hardwood pioneering species such as paper birch and aspen. The white spruce forests have economic importance in terms of supplying local saw mills with timber and providing home building logs for the area.

Paper birch forests are found on better-drained, usually silty-textured soils. These forests are typically a result of fires and will usually be replaced through succession by white spruce or black spruce forests. Trees range from 59 to 82 feet (18 to 25 m) in height and up to 18 inches (45 cm) in diameter. Tree densities range from 15,000 trees per acre (6,000/h) in younger stands to 400 trees per acre (160/h) in mature stands. Common shrub components are alder and highbush cranberry. Lingonberry and twinflower are common ground covers, as is Canada bluejoint if stocking density is low.

Black spruce forests dominate wetter and colder sites. The trees may attain a height of 30 feet (9 m) with a diameter of 4 inches (10 cm) in the course of 100 years. These are low productivity sites with young stocking densities up to 15,000 trees per acre (6,000/h) and mature densities that may be as high as 10,000 trees per acre (4,000/h). Shrubs associated with black spruce forests are alder, willow, and Labrador tea. Sphagnum and club mosses with some crowberry, lingonberry, and bog blueberry dominate ground cover.

Aspen forests and balsam poplar forests are also found in the Greater Fairbanks Area. These forests often grow in areas of relatively recent soil disturbance, such as flood plains or areas subjected to hot intense fires.

Use and Management of Soils for Agriculture

Soils have a wide range of characteristics that influence their potential for agricultural development. A thorough understanding of soil properties can ensure maximum agricultural benefits while preserving the integrity of the resource base.

Woodland covers most of the soils in the survey area. Some of these soils are suitable for clearing and development for pasture, hay, and cool season row crops. North-facing slopes are generally not suitable for agricultural development because they lack sun exposure and tend to be colder. They may also settle unevenly after clearing because of permafrost. Ridge tops generally have good sun exposure but the soils tend to be shallow and acidic. Erosion control practices are required on ridges and south-facing slopes to maintain productivity. Level and nearly level ground may be suitable for agriculture unless it is subject to frequent flooding or has a high water table. Some permafrost soils can be developed for agriculture but other permafrost soils may settle unevenly and be subject to thermokarst. The local offices of the Natural **Resources Conservation Service or Alaska** Cooperative Extension can provide guidance on the suitability of particular soils for crop production.

Subsistence

The Greater Fairbanks Area has a tradition of subsistence use of the native plant community. Harvesting of native plants for food, medicine, fiber, and fodder is an important land use. When developing land for agricultural production, consider managing a portion of the land for berry, birch bark or syrup production or as a wood lot. For more information about the use of native plants, consult local Alaska native groups, Alaska Cooperative Extension, or other ethnic organizations.

Land Clearing

The University of Alaska Cooperative Extension Service publication *Efficient Land Clearing Techniques* (Colla and Southwick, 1987), describes methods for clearing land. The Fairbanks Soil and Water Conservation District or the Natural Resources Conservation Service can assist farmers in developing a plan for bringing land into production. These offices can also provide information on appropriate land clearing and breaking techniques and the suitability of soils for specific crops. They can also provide referrals to federal, state, and local agencies for information on regulations affecting land clearing and removal of clearing debris.

Adapted Crops

Crops that will grow in cool climates with long summer days are best suited for this area. New crop varieties are released every year and changes in varieties, farming practices, and markets affect what crops are grown in the area. Historically grass hay has been a staple crop. Spring seeded small grains are grown for livestock feed and human consumption. Grass for seed, legumes such as field peas, and cool season vegetables have been successful crops. Potatoes for both seed and table are also grown and exported. Small fruits and specialty crops have potential for the area, particularly for niche markets. The Alaska Cooperative Extension can provide information and advice on suitable crop varieties and production techniques. The Alaska Division of Agriculture has information regarding marketing and production of agricultural products and the Alaska Agricultural Statistics Service can provide crop yield data and production trends.

Irrigation

Fairbanks has an average annual precipitation of only 10 to 13 inches (25 to 33 cm). Irrigation will improve crop growth and allow better use of the available plant nutrients. Vegetable crops are usually grown under irrigation. Potatoes have been grown under dryland conditions but yields are increased in some years by irrigation. Even grass hay yields can be improved with irrigation, particularly during establishment. The economic feasibility of irrigation, however, must be determined on a case by case basis. The Natural Resources Conservation Service and the Fairbanks Soil and Water Conservation District can help farmers decide if irrigation is appropriate for their operation and what type of irrigation system best suits their needs.

Fertilizer Requirements

The soils of the Greater Fairbanks Area do not have enough natural fertility to sustain farm or garden crops without the addition of commercial or organic fertilizer. The Natural Resources Conservation Service recommends soil testing on a regular schedule to monitor the fertility of the soil. Soil analysis should include the macronutrients nitrogen, phosphorus, and potassium (N-P-K). Many soils in the area are also deficient in micronutrients. Many crops, for example, do better when boron is added to the soil. Micronutrients, however, can be toxic to plants if over applied. The Alaska Cooperative Extension makes fertilizer recommendations for farm and garden crops, lawns and landscaping plants.

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, as well as a discussion of their suitability, limitations, and management for specified uses. To characterize and map the soils, soil scientists 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 soil scientists also observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of native plants; and the kinds of geologic materials.

Before beginning the fieldwork, relevant information on the climate, geology, geomorphology, hydrology, and vegetation of the survey area was assembled. Aerial photography of the survey area was acquired and prepared for field use and mapping. Aerial photography taken in 1996 was enlarged to a scale of 1:24,000 for use during the survey fieldwork. Final compilation for the publication was done on 1:25,000 scale orthophotography.

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 soil 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.

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.

Detailed Soil Map Unit

The map units delineated on the detailed soil maps in 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.

A map unit delineation on a soil 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. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils 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 minor components that belong to taxonomic classes other than those of the major soils.

Most minor 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 non-contrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. 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 contrasting components are mentioned in the map unit descriptions. A few areas of minor components 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 minor components 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. If intensive use of small areas is planned, however, 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.

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. 145—Minto-Chatanika complex, 0 to 3 percent slopes, 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. There are no associations mapped in the Greater Fairbanks Area.

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. 182—Typic Cryaquent, Histic Cryaquent and Terric Cryofibrist, is an example of an undifferentiated group.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. 109—Dumps, landfill, 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.

101—Bolio peat

Elevation: 423 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Bolio and Similar Soils

Extent: 70 to 85 percent of the map unit Landform: depressions on terraces, flats on terraces Slope shape: concave, linear Slope range: 0 to 2 percent Parent material: herbaceous organic material Depth to permafrost: 14 to 28 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 5 inches Ponding: frequent Available water capacity (approximate): 3.5 inches Vegetation: black spruce and tamarack woodland Representative Profile: Oi-0 to 12 inches; brown peat, high permeability Oe—12 to 16 inches; very dark gray mucky peat, moderately high permeability Of-16 to 72 inches; very dark gravish brown

Minor Components

permanently frozen mucky peat, impermeable

Goldstream and similar soils: 0 to 10 percent of the map unit

Lemeta and similar soils: 5 to 15 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

102—Bradway very fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Bradway and Similar Soils

Extent: 75 to 90 percent of the map unit Landform: depressions Slope shape: concave Slope range: 0 to 2 percent Parent material: alluvium Depth to permafrost: 18 to 35 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: poorly drained Flooding: occasional Depth to high water table (approximate): April-Sept.-0 inches Ponding: frequent Available water capacity (approximate): 4.5 inches Vegetation: dwarf birch and willow scrub Representative Profile: Oi-0 to 7 inches; dark brown slightly decomposed plant material, high permeability A-7 to 10 inches: dark gravish brown mucky silt loam, moderately high permeability Cg-10 to 26 inches; gray stratified very fine sandy loam to fine sand, high permeability Cfg-26 to 72 inches; dark brown permanently frozen material, impermeable Minor Components

Mosquito and similar soils: 0 to 10 percent of the

map unit North Pole and similar soils: 0 to 10 percent of the map unit

Tanana and similar soils: 0 to 10 percent of the map unit Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, ponding, flooding, frost action

103—Chatanika mucky silt loam, 0 to 3 percent slopes

Elevation: 423 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chatanika and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave Slope range: 0 to 3 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi-0 to 4 inches; very dark gravish brown slightly decomposed plant material, high permeability A-4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; very dark gravish brown

silt loam, moderately high permeability Cfg—21 to 72 inches; very dark grayish brown

permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes more than 3 percent, and similar soils: 5 to 10 percent of the map unit

Minto and similar soils: 3 to 7 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map unit

Histels and similar soils: 0 to 5 percent of the map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

104—Chatanika mucky silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chatanika and Similar Soils

- Extent: 70 to 80 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave Slope range: 3 to 7 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi-0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability A-4 to 6 inches; gravish brown mottled mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; very dark gravish brown silt loam, moderately high permeability
 - Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

105—Chatanika mucky silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chatanika and Similar Soils

Extent: 75 to 85 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: concave, linear Slope range: 7 to 12 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi-0 to 4 inches; very dark gravish brown slightly decomposed plant material, high permeability A-4 to 6 inches; gravish brown mottled mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; very dark gravish brown

silt loam, moderately high permeability Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 7 percent, and similar

soils: 0 to 5 percent of the map unit

- Chatanika, slopes more than 12 percent, and similar soils: 0 to 5 percent of the map unit
- Goldstream and similar soils: 0 to 10 percent of the map unit
- Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

106—Chatanika mucky silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chatanika and Similar Soils

- Extent: 75 to 85 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave Slope range: 12 to 20 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi—0 to 4 inches; gravish brown mottled slightly decomposed plant material, high permeability A-4 to 6 inches; very dark gravish brown mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; gravish brown mottled silt loam, moderately high permeability Cfg-21 to 72 inches; gravish brown mottled
 - permanently frozen material, impermeable

Minor Components

Chatanika, slopes less than 12 percent, and similar soils: 0 to 10 percent of the map unit

Goldstream and similar soils: 0 to 10 percent of the map unit

Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

107—Chatanika-Goldstream complex

Elevation: 423 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chatanika and Similar Soils

Extent: 50 to 60 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave Slope range: 0 to 5 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi-0 to 4 inches; gravish brown mottled slightly decomposed plant material, high permeability A-4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; gravish brown mottled silt loam, moderately high permeability Cfg-21 to 72 inches; gravish brown mottled permanently frozen material, impermeable

Goldstream and Similar Soils

Extent: 30 to 40 percent of the map unit *Landform:* valley floors *Slope shape:* concave, linear *Slope range:* 0 to 5 percent *Parent material:* organic material over loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce woodland Representative Profile: Oi—0 to 9 inches; very dark grayish brown mucky peat, high permeability A-9 to 12 inches; gray mucky silt loam, moderately high permeability Bijg-12 to 20 inches; dark brown silt loam, moderately high permeability Cfg-20 to 72 inches; very dark gravish brown permanently frozen material, impermeable

Minor Components

Minto and similar soils: 0 to 5 percent of the map unit Chatanika, slopes more than 5 percent, and similar soils: 0 to 5 percent of the map unit Histels and similar soils: 0 to 5 percent of the map

unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

108—Chena very fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Chena and Similar Soils

Extent: 80 to 95 percent of the map unit Landform: stream terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: excessively drained Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 3.5 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

- Oi—0 to 4 inches; very dark gray slightly decomposed plant material, high permeability C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high permeability
- 2C2—9 to 72 inches; grayish brown very gravelly sand, high permeability
- *Note:* This soil has 0 to 10 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, sand and gravel

109—Dumps, landfill

Elevation: 397 to 1,968 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Dumps, landfill

Extent: 100 percent of the map unit *Landform:* sanitary landfills *Slope shape:* linear, convex, concave *Slope range:* 0 to 5 percent

110—Dumps, mine

Elevation: 397 to 1,968 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Dumps, mine

Extent: 100 percent of the map unit *Landform:* spoil piles *Slope shape:* concave, convex, linear

Slope range: 0 to 70 percent

Management Considerations

Soil-related factors: excess slope, large stones, permeability

111—Eielson fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Eielson and Similar Soils

Extent: 70 to 90 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-47 inches Ponding: frequent Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile: Oi-0 to 2 inches; very dark brown slightly decomposed plant material, high permeability O/C-2 to 49 inches; dark gravish brown very fine sandy loam, moderately high permeability C1-49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability 2C2-71 to 72 inches; very dark brown very gravelly sand, high permeability Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit

Tanana and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

112—Eielson-Piledriver complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Eielson and Similar Soils

Extent: 50 to 70 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May-0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

- Oi—0 to 2 inches; dark grayish brown slightly decomposed plant material, high permeability O/C—2 to 49 inches; very dark brown very fine
- sandy loam, moderately high permeability C1—49 to 71 inches; olive brown and dark gray
- stratified silt loam to fine sand, moderately high permeability
- 2C2—71 to 72 inches; dark grayish brown very gravelly sand, high permeability
- Note: This soil has more than 40 inches of loamy material over sand and gravel.

Piledriver and Similar Soils

Extent: 25 to 40 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: rare Depth to high water table (approximate): April-May— 0 inches; June-Sept.—47 inches Ponding: frequent Available water capacity (approximate): 7.3 inches

Vegetation: white spruce and balsam poplar forest

Representative Profile:

- Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
- C1—3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability
- C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
- 2C3—33 to 72 inches; light olive brown and grayish brown very gravelly sand, high permeability
- *Note:* This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 5 percent of the map unit

- Noonku and similar soils: 0 to 5 percent of the map unit
- Salchaket and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

113—Eielson-Tanana complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Eielson and Similar Soils

Extent: 30 to 60 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: occasional Depth to high water table (approximate): April-May— 0 inches; June-Sept.—47 inches Ponding: frequent Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

- Oi—0 to 2 inches; olive brown and dark gray slightly decomposed plant material, high permeability
- O/C—2 to 49 inches; dark grayish brown very fine sandy loam, moderately high permeability
- C1—49 to 71 inches; very dark brown stratified silt loam to fine sand, moderately high permeability
- 2C2—71 to 72 inches; olive brown and dark gray very gravelly sand, high permeability
- *Note:* This soil has more than 40 inches of loamy material over sand and gravel.

Tanana and Similar Soils

Extent: 20 to 50 percent of the map unit

Landform: terraces

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium and/or loess over alluvium Depth to permafrost: 16 to 47 inches

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.-6 to 12 inches

Ponding: frequent

Available water capacity (approximate): 5.2 inches

Vegetation: white spruce, black spruce, and paper birch forest

Representative Profile:

- Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability A—3 to 6 inches; very dark grayish brown mucky
- silt loam, moderately high permeability Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability
- Cjjfg—25 to 72 inches; dark gravish brown permanently frozen material, impermeable

Minor Components

Peede and similar soils: 10 to 15 percent of the map unit

Tanacross and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

114—Ester peat, 20 to 45 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Ester and Similar Soils

Extent: 65 to 75 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: linear Slope range: 20 to 45 percent Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist Depth to permafrost: 7 to 30 inches Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by water-severe; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-Sept.—4 inches Ponding: none Available water capacity (approximate): 1.3 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 9 inches; olive brown peat, high permeability ABjjf-9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability 2Cjjf—12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable 2Crf-21 to 72 inches; olive brown permanently frozen weathered bedrock Minor Components

Brigadier and similar soils: 0 to 5 percent of the map unit

- Ester, rolling, and similar soils: 0 to 10 percent of the map unit
- Ester, very steep, and similar soils: 0 to 5 percent of the map unit
- Gilmore and similar soils: 0 to 5 percent of the map unit
- Saulich and similar soils: 0 to 5 percent of the map unit
- Steese and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

115—Ester peat, very steep

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Ester and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: linear Slope range: 45 to 70 percent Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist Depth to permafrost: 7 to 30 inches Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by water-severe; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-Sept.—4 inches Ponding: none Available water capacity (approximate): 1.3 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 9 inches; black peat, high permeability ABjjf-9 to 12 inches; dark reddish brown permanently frozen mucky silt loam, moderately high permeability 2Cjjf—12 to 21 inches; olive brown permanently frozen very channery silt loam, impermeable 2Crf-21 to 72 inches; black permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 5 to 10 percent of the map unit

Ester, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit

Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

116—Fairbanks silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 85 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 3 to 7 percent Parent material: loess Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest Representative Profile: Oi-0 to 3 inches; gravish brown or light olive brown slightly decomposed plant material, high permeability A,Bw-3 to 30 inches; light olive brown silt loam, moderately high permeability C-30 to 72 inches; gravish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 5 to 12 percent of the map unit

- Fairbanks, slopes less than 3 percent, and similar soils: 2 to 10 percent of the map unit
- Fairbanks, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: frost action

117—Fairbanks silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

- Extent: 75 to 90 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 7 to 12 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and guaking aspen forest Representative Profile: Oi-0 to 3 inches; light olive brown slightly decomposed plant material, high permeability A,Bw-3 to 30 inches; gravish brown or light olive brown silt loam, moderately high permeability
 - C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes more than 12 percent, and similar soils: 0 to 15 percent of the map unit

Fairbanks, slopes less than 7 percent, and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

118—Fairbanks silt loam, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 65 to 80 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex. linear Slope range: 12 to 20 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.2 inches Representative Profile: Oi-0 to 3 inches; light olive brown slightly decomposed plant material, high permeability A,Bw-3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability C-30 to 72 inches; light olive brown silt loam,

moderately high permeability

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 0 to 15 percent of the map unit
Fairbanks, slopes more than 20 percent, and similar soils: 0 to 15 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

119—Fairbanks silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 75 to 90 percent of the map unit *Landform:* hills *Position on slope:* backslopes *Slope shape:* convex, linear *Slope range:* 20 to 30 percent Parent material: loess

Hazard of erosion (organic mat removed): by

water—severe; by wind—severe Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest

Representative Profile:

- Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
- A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
- C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 20 percent, and similar soils: 0 to 15 percent of the map unit

Fairbanks, slopes more than 30 percent, and similar soils: 0 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

120—Fairbanks silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 80 to 90 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 30 to 45 percent Parent material: loess Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: high Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-

Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking

aspen forest Representative Profile:

- Oi—0 to 3 inches; light olive brown slightly decomposed plant material, high permeability
- A,Bw—3 to 30 inches; grayish brown or light olive brown silt loam, moderately high permeability
- C—30 to 72 inches; light olive brown silt loam, moderately high permeability

Minor Components

Fairbanks, slopes less than 30 percent, and similar soils: 0 to 5 percent of the map unit

Fairbanks, slopes more than 45 percent, and similar soils: 0 to 15 percent of the map unit

Steese and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

121—Fairbanks silt loams, strongly sloping and steep

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks, strongly sloping, and Similar Soils

Extent: 55 to 65 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 7 to 15 percent Parent material: loess Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

- Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
- A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
- C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Fairbanks, steep, and Similar Soils

Extent: 25 to 35 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 30 to 55 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and guaking aspen forest Representative Profile: Oi-0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability A,Bw-3 to 30 inches; light olive brown silt loam, moderately high permeability C-30 to 72 inches; gravish brown or light olive

5––30 to 72 inches; gravish brown or light olive brown silt loam, moderately high permeability

Minor Components

Minto and similar soils: 0 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, frost action

122—Fairbanks-Steese complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 50 to 60 percent of the map unit *Landform:* hills *Position on slope:* backslopes *Slope shape:* convex, linear

Slope range: 12 to 20 percent

- Parent material: loess
- Hazard of erosion (organic mat removed): by
- water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches

Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:

- Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
- A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
- C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 25 to 40 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: medium Drainage class: well drained Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest Representative Profile: Oi-0 to 2 inches; light olive brown slightly decomposed plant material, high permeability A-2 to 5 inches; dark brown silt loam, moderately high permeability Bw-5 to 27 inches; brown silt loam, moderately high permeability 2C-27 to 33 inches; light olive brown very channery silt loam, high permeability 2Cr-33 to 72 inches; light olive brown weathered bedrock

Minor Components

Fairbanks, slopes less than 12 percent, and similar soils: 2 to 7 percent of the map unit

Fairbanks, slopes more than 20 percent, and similar soils: 2 to 7 percent of the map unit

Steese, slopes more than 20 percent, and similar soils: 2 to 5 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map unit

Steese, slopes less than 12 percent, and similar soils: 2 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

123—Fairbanks-Steese complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fairbanks and Similar Soils

Extent: 30 to 60 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: convex, linear Slope range: 20 to 30 percent Parent material: loess Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: high Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 12.2 inches Vegetation: white spruce, paper birch, and guaking

aspen forest

Representative Profile:

- Oi—0 to 3 inches; grayish brown or light olive brown slightly decomposed plant material, high permeability
- A,Bw—3 to 30 inches; light olive brown silt loam, moderately high permeability
- C—30 to 72 inches; grayish brown or light olive brown silt loam, moderately high permeability

Steese and Similar Soils

Extent: 15 to 50 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 20 to 30 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest Representative Profile: Oi-0 to 2 inches; brown slightly decomposed plant material, high permeability A-2 to 5 inches; light olive brown silt loam, moderately high permeability Bw-5 to 27 inches; dark brown silt loam, moderately high permeability 2C-27 to 33 inches; brown very channery silt loam, high permeability 2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Fairbanks, slopes less than 20 percent, and similar soils: 3 to 12 percent of the map unitSteese, slopes less than 20 percent, and similar soils: 3 to 12 percent of the map unit

Gilmore and similar soils: 0 to 5 percent of the map unit

Steese, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

124—Fubar-Piledriver complex, occasionally flooded

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: moderately well drained Flooding: rare Depth to high water table (approximate): April-Sept.-54 inches Ponding: none Available water capacity (approximate): 3.4 inches *Vegetation:* white spruce, balsam poplar, and paper birch forest Representative Profile: Oi-0 to 2 inches; dark gravish brown slightly decomposed plant material, high permeability C1-2 to 10 inches; dark gray stratified fine sand to silt loam, moderately high permeability 2C2-10 to 72 inches; dark brown very gravelly coarse sand, high permeability Note: This soil has 1 to 10 inches of loamy material over sand and gravel.

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit *Landform:* flood plains *Slope shape:* linear *Slope range:* 0 to 2 percent *Parent material:* alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: rare Depth to high water table (approximate): April-May— 0 inches; June-Sept.—47 inches Ponding: frequent Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile: Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 5 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

125—Gilmore silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 90 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 3 to 7 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability A-3 to 6 inches; dark brown silt loam, moderately high permeability Bw-6 to 12 inches; olive brown silt loam, moderately high permeability 2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability 2Cr-19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit Gilmore, slopes more than 7 percent, and similar

soils: 2 to 10 percent of the map unit

Steese and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: bedrock

126—Gilmore silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 65 to 75 percent of the map unit Landform: hills Position on slope: backslopes, summits Slope shape: linear, convex Slope range: 7 to 12 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, guaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches; yellowish brown silt loam, moderately high permeability Bw-6 to 12 inches; olive brown silt loam, moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability

2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes more than 12 percent, and similar soils: 10 to 15 percent of the map unit Gilmore, slopes less than 7 percent, and similar soils: 5 to 10 percent of the map unit Steese and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

127—Gilmore silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches 29

Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability A-3 to 6 inches; olive brown silt loam, moderately high permeability Bw-6 to 12 inches; dark brown silt loam, moderately high permeability 2BC-12 to 19 inches; yellowish brown very channery silt loam, high permeability 2Cr-19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 12 percent of the map unit

Gilmore, slopes more than 20 percent, and similar soils: 10 to 15 percent of the map unit

Steese and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

128—Gilmore silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 80 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 20 to 30 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, guaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches; yellowish brown silt loam, moderately high permeability Bw-6 to 12 inches; olive brown silt loam, moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability 2Cr-19 to 72 inches: dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar

soils: 5 to 15 percent of the map unit Steese and similar soils: 5 to 15 percent of the map unit

Gilmore, slopes more than 30 percent, and similar soils: 0 to 5 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

129—Gilmore silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 30 to 45 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches; yellowish brown silt loam, moderately high permeability Bw-6 to 12 inches: olive brown silt loam. moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability 2Cr-19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar soils: 5 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map unit

Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

130—Gilmore silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 80 to 90 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: convex, linear Slope range: 45 to 70 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, guaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability A-3 to 6 inches; dark brown silt loam, moderately high permeability Bw-6 to 12 inches; olive brown silt loam, moderately high permeability 2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability 2Cr-19 to 72 inches; yellowish brown weathered bedrock, high permeability

Minor Components

Ester and similar soils: 0 to 10 percent of the map unit

Gilmore, slopes less than 45 percent, and similar soils: 0 to 10 percent of the map unit

Steese and similar soils: 0 to 10 percent of the map unit

Rock outcrop: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

131—Gilmore-Ester complex, 12 to 70 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 35 to 55 percent of the map unit Landform: hills Position on slope: backslopes, summits Slope shape: linear, convex Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist

Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; olive brown slightly decomposed plant material, high permeability A-3 to 6 inches; dark brown silt loam, moderately high permeability Bw-6 to 12 inches; yellowish brown silt loam, moderately high permeability 2BC—12 to 19 inches; olive brown very channery silt loam, high permeability 2Cr-19 to 72 inches; olive brown weathered bedrock, high permeability

Ester and Similar Soils

Extent: 30 to 50 percent of the map unit Landform: hills Position on slope: backslopes Slope shape: linear Slope range: 20 to 70 percent Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist Depth to permafrost: 7 to 30 inches Depth to bedrock (paralithic): 14 to 39 inches Hazard of erosion (organic mat removed): by water-severe; by wind-slight Runoff: very high Drainage class: very poorly drained Floodina: none Depth to high water table (approximate): April-Sept.—4 inches Ponding: none Available water capacity (approximate): 1.3 inches Vegetation: black spruce woodland Representative Profile: Oi—0 to 9 inches; olive brown peat, high permeability ABjjf-9 to 12 inches; black permanently frozen mucky silt loam, moderately high permeability 2Cjjf-12 to 21 inches; dark reddish brown permanently frozen very channery silt loam, impermeable

2Crf—21 to 72 inches; olive brown permanently frozen weathered bedrock

Minor Components

Brigadier and similar soils: 7 to 15 percent of the map unit

Steese and similar soils: 0 to 7 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, excess slope, water table, bedrock

132—Gilmore-Steese complex, 3 to 15 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Gilmore and Similar Soils

Extent: 60 to 70 percent of the map unit Landform: hills Position on slope: backslopes, summits Slope shape: convex, linear Slope range: 3 to 15 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; yellowish brown slightly decomposed plant material, high permeability A-3 to 6 inches: olive brown silt loam. moderately high permeability Bw-6 to 12 inches; dark brown silt loam, moderately high permeability

2BC—12 to 19 inches; yellowish brown very channery silt loam, high permeability2Cr—19 to 72 inches; yellowish brown weathered bedrock, high permeability

Steese and Similar Soils

Extent: 30 to 40 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 3 to 15 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and guaking aspen forest Representative Profile: Oi-0 to 2 inches; dark brown slightly decomposed plant material, high permeability A-2 to 5 inches; brown silt loam, moderately high permeability Bw-5 to 27 inches; light olive brown silt loam, moderately high permeability 2C-27 to 33 inches; dark brown very channery silt loam, high permeability 2Cr-33 to 72 inches: dark brown weathered bedrock

Minor Components

Steese, slopes more than 15 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

133—Goldstream peat, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches

Frost-free period: 80 to 120 days

Goldstream and Similar Soils

Extent: 70 to 85 percent of the map unit Landform: valley floors Slope shape: concave, linear Slope range: 0 to 3 percent Parent material: organic material over loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May— 0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 9 inches; gray mucky peat, high permeability A-9 to 12 inches: dark brown mucky silt loam. moderately high permeability Bjjg—12 to 20 inches; very dark gravish brown silt loam, moderately high permeability Cfg-20 to 72 inches; gray permanently frozen material, impermeable

Minor Components

- Chatanika and similar soils: 5 to 15 percent of the map unit
- Histels and similar soils: 0 to 5 percent of the map unit
- Goldstream, slopes more than 3 percent, and similar soils: 0 to 5 percent of the map unit
- Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

134—Goldstream peat, 3 to 7 percent slopes

Elevation: 397 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Goldstream and Similar Soils

Extent: 80 to 85 percent of the map unit Landform: valley floors Slope shape: concave, linear Slope range: 3 to 7 percent Parent material: organic material over loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 9 inches; dark brown mucky peat, high permeability A-9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability Bjjg-12 to 20 inches; gray silt loam, moderately high permeability Cfg-20 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit

Histels and similar soils: 0 to 7 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

135—Goldstream-Histels complex, 0 to 3 percent slopes

Elevation: 397 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Goldstream and Similar Soils

Extent: 40 to 60 percent of the map unit *Landform:* valley floors

Slope shape: concave, linear Slope range: 0 to 3 percent Parent material: organic material over loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Representative Profile: Oi-0 to 9 inches; dark brown mucky peat, high permeability A-9 to 12 inches; very dark grayish brown mucky silt loam, moderately high permeability

- Bjjg—12 to 20 inches; gray silt loam, moderately high permeability
- Cfg—20 to 72 inches; dark brown permanently frozen material, impermeable

Histels and Similar Soils

Extent: 45 to 50 percent of the map unit Landform: depressions on terraces, flats on terraces Slope shape: concave Slope range: 0 to 3 percent Parent material: organic material over alluvium and/or loess Depth to permafrost: 16 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-Sept.-0 inches Ponding: frequent Available water capacity (approximate): 3.9 inches Vegetation: black spruce woodland Representative Profile: Oi—0 to 12 inches; black peat, high permeability Oe-12 to 17 inches; brown mucky peat, moderately high permeability Oef—17 to 26 inches; very dark gray permanently frozen mucky peat, impermeable Cfg-26 to 72 inches; black permanently frozen material, impermeable

Minor Components

Terric Cryofibrists and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

136—Histels

Elevation: 423 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Histels and Similar Soils

Extent: 85 to 90 percent of the map unit Landform: depressions on terraces, flats on terraces Slope shape: concave Slope range: 0 to 3 percent Parent material: organic material over alluvium and/or loess Depth to permafrost: 16 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 3.9 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 12 inches; very dark gray peat, high permeability Oe-12 to 17 inches; brown mucky peat, moderately high permeability Oef-17 to 26 inches; black permanently frozen mucky peat, impermeable Cfg-26 to 72 inches; very dark gray permanently frozen material, impermeable

Minor Components

Goldstream and similar soils: 10 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

137—Jarvis fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Jarvis and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-May-0 inches: June-Sept.-more than 72 inches Ponding: occasional Available water capacity (approximate): 5.9 inches Vegetation: white spruce, balsam poplar, and paper birch forest Representative Profile: Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability C1-3 to 6 inches; olive brown very fine sandy loam, moderately high permeability C2-6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability 2C3-24 to 72 inches; gray very gravelly sand, high permeability Note: This soil has 10 to 40 inches of loamy material over sand and gravel. Minor Components

Salchaket and similar soils: 5 to 15 percent of the map unit

Chena and similar soils: 0 to 5 percent of the map unit

Noonku and similar soils: 0 to 10 percent of the map unit

Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

138—Jarvis-Chena complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Jarvis and Similar Soils

Extent: 50 to 60 percent of the map unit

Landform: flood plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches

Ponding: occasional

- Available water capacity (approximate): 5.9 inches
- Vegetation: white spruce, balsam poplar, and paper birch forest

Representative Profile:

- Oe—0 to 3 inches; grayish brown moderately decomposed plant material, high permeability
- C1—3 to 6 inches; olive brown very fine sandy loam, moderately high permeability
- C2—6 to 24 inches; black stratified sand to fine sand to very fine sandy loam, moderately high permeability
- 2C3—24 to 72 inches; gray very gravelly sand, high permeability
- *Note:* This soil has 10 to 40 inches of loamy material over sand and gravel.

Chena and Similar Soils

Extent: 30 to 40 percent of the map unit Landform: stream terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: excessively drained Flooding: rare Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 3.5 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 4 inches; grayish brown slightly decomposed plant material, high permeability

- C1—4 to 9 inches; olive brown stratified fine sand to silt loam, high permeability
- 2C2—9 to 72 inches; very dark gray very gravelly sand, high permeability
- *Note:* This soil has 0 to 10 inches of loamy material over sand and gravel.

Minor Components

Noonku and similar soils: 0 to 10 percent of the map unit

Salchaket and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding, sand and gravel

139—Jarvis-Salchaket complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Jarvis and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches Ponding: occasional Available water capacity (approximate): 5.9 inches Vegetation: white spruce, balsam poplar, and paper birch forest Representative Profile: Oe-0 to 3 inches: black moderately decomposed plant material, high permeability C1-3 to 6 inches; olive brown very fine sandy loam, moderately high permeability C2-6 to 24 inches; grayish brown stratified sand to fine sand to very fine sandy loam,

moderately high permeability 2C3—24 to 72 inches; gray very gravelly sand, high permeability *Note:* This soil has 10 to 40 inches of loamy material over sand and gravel.

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches Ponding: frequent Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper birch forest Representative Profile: Oi-0 to 3 inches; variegated slightly decomposed plant material, high permeability C1—3 to 24 inches; dark brown very fine sandy loam, moderately high permeability C2-24 to 45 inches; olive brown stratified silt loam to fine sand, moderately high

permeability 2C3—45 to 72 inches; dark grayish brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 5 percent of the map unit

Chena and similar soils: 0 to 5 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permeability, flooding, ponding

140—Lemeta peat

Elevation: 423 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Lemeta and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: fens on terraces Slope shape: concave, linear Slope range: 0 to 1 percent Parent material: mossy organic material over herbaceous organic material Depth to permafrost: 15 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 3.0 inches Vegetation: black spruce woodland Representative Profile: Oi-0 to 20 inches; yellowish brown peat, high permeability Oef-20 to 72 inches; very dark brown permanently frozen mucky peat, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map unit

Goldstream and similar soils: 5 to 15 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

141—Liscum-Noonku complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Liscum and Similar Soils

Extent: 45 to 55 percent of the map unit Landform: alluvial flats Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 4 inches Ponding: frequent Available water capacity (approximate): 11.9 inches Vegetation: sedges and grasses Representative Profile: Oi-0 to 3 inches; black peat, high permeability Oa-3 to 11 inches; very dark grayish brown muck, moderately low permeability A-11 to 15 inches; dark brown mucky silt loam, moderately high permeability Bq-15 to 70 inches; olive brown and gray stratified silt loam to loamy fine sand, moderately high permeability C-70 to 72 inches; olive brown very gravelly sandy loam, high permeability Note: This soil has more than 40 inches of loamy material over sand and gravel. Noonku and Similar Soils Extent: 35 to 50 percent of the map unit Landform: sloughs Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub Representative Profile:

Oe—0 to 2 inches; gray moderately decomposed plant material, moderately high permeability

A—2 to 6 inches; dark brown silt loam, moderately high permeability

Cg1-6 to 47 inches; very dark brown stratified

sand to fine sand to very fine sandy loam, moderately high permeability 2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

North Pole and similar soils: 0 to 7 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

142—Minto silt loam, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 75 to 85 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex Slope range: 0 to 3 percent Parent material: loess Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: low Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; very dark gravish brown slightly decomposed plant material, high permeability A-5 to 9 inches; grayish brown silt loam, moderately high permeability Bw-9 to 16 inches; light olive brown silt loam, moderately high permeability

C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 10 percent of the map unit

Fairbanks and similar soils: 0 to 10 percent of the map unit

Minto, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

143—Minto silt loam, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 60 to 80 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex Slope range: 3 to 7 percent Parent material: loess Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; dark brown slightly decomposed plant material, high permeability A-5 to 9 inches; very dark gravish brown silt loam, moderately high permeability Bw-9 to 16 inches; light olive brown silt loam, moderately high permeability C-16 to 72 inches; grayish brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 10 to 15 percent of the map unit

- Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit
- Fairbanks and similar soils: 0 to 10 percent of the map unit
- Minto, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action

144—Minto silt loam, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 50 to 70 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: concave, linear, convex Slope range: 7 to 12 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; gravish brown slightly decomposed plant material, high permeability A-5 to 9 inches; light olive brown silt loam, moderately high permeability Bw-9 to 16 inches; very dark grayish brown silt loam, moderately high permeability C-16 to 72 inches; dark brown silt loam, moderately high permeability Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Chatanika and similar soils: 5 to 15 percent of the map unit

Minto, slopes less than 7 percent, and similar soils: 5 to 15 percent of the map unit

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit

- Fairbanks and similar soils: 5 to 15 percent of the map unit
- Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: thermokarst, frost action, excess slope

145—Minto-Chatanika complex, 0 to 3 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 35 to 50 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex Slope range: 0 to 3 percent Parent material: loess Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: low Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; grayish brown slightly decomposed plant material, high permeability A-5 to 9 inches; dark brown silt loam, moderately high permeability Bw-9 to 16 inches; very dark gravish brown silt loam, moderately high permeability C-16 to 72 inches; light olive brown silt loam, moderately high permeability Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 35 to 50 percent of the map unit *Landform:* hills

Position on slope: footslopes, toeslopes Slope shape: linear, concave Slope range: 0 to 3 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi—0 to 4 inches; gravish brown mottled slightly decomposed plant material, high permeability A—4 to 6 inches; very dark gravish brown mucky silt loam, moderately high permeability C/Ag-6 to 21 inches; gravish brown mottled silt loam, moderately high permeability Cfg-21 to 72 inches; gravish brown mottled permanently frozen material, impermeable

Minor Components

- Chatanika, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit
- Goldstream and similar soils: 2 to 10 percent of the map unit
- Minto, slopes more than 3 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

146—Minto-Chatanika complex, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 30 to 40 percent of the map unit *Landform:* hills *Position on slope:* footslopes, toeslopes *Slope shape:* linear, concave, convex *Slope range:* 3 to 7 percent Parent material: loess

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: moderately well drained Flooding: none

Depth to high water table (approximate): April-May— 4 to 8 inches; June-Sept.—more than 72 inches

Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile:

- Oi—0 to 5 inches; light olive brown slightly decomposed plant material, high permeability
- A—5 to 9 inches; grayish brown silt loam, moderately high permeability
- Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability
- C—16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 30 to 40 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave Slope range: 3 to 7 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi—0 to 4 inches; very dark gravish brown slightly decomposed plant material, high permeability A-4 to 6 inches; gravish brown mottled mucky silt loam, moderately high permeability C/Ag—6 to 21 inches; very dark gravish brown silt loam, moderately high permeability Cfg-21 to 72 inches; very dark gravish brown permanently frozen material, impermeable

Minor Components

- Minto, slopes less than 3 percent, and similar soils: 5 to 10 percent of the map unit
- Minto, slopes more than 7 percent, and similar soils: 5 to 10 percent of the map unit
- Saulich and similar soils: 0 to 10 percent of the map unit
- Chatanika, slopes less than 3 percent, and similar soils: 0 to 5 percent of the map unit
- Chatanika, slopes more than 7 percent, and similar soils: 0 to 5 percent of the map unit
- Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

147—Minto-Chatanika complex, 7 to 12 percent slopes

Elevation: 397 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex Slope range: 7 to 12 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; dark brown slightly decomposed plant material, high permeability

A—5 to 9 inches; very dark grayish brown silt loam, moderately high permeability

Bw—9 to 16 inches; grayish brown silt loam, moderately high permeability

- C—16 to 72 inches; light olive brown silt loam, moderately high permeability
- *Note:* Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit

Landform: hills Position on slope: toeslopes, footslopes

Slope shape: linear, concave

Slope range: 7 to 12 percent

Parent material: colluvium and/or loess

Depth to permafrost: 12 to 39 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May-0 inches; June-Sept.—8 inches

Ponding: frequent

Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest

Representative Profile:

Oi—0 to 4 inches; very dark grayish brown slightly decomposed plant material, high permeability

A—4 to 6 inches; grayish brown mottled mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; very dark grayish brown silt loam, moderately high permeability

Cfg—21 to 72 inches; very dark grayish brown permanently frozen material, impermeable

Minor Components

Minto, slopes more than 12 percent, and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit

Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

148—Minto-Chatanika complex, 12 to 20 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Minto and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex Slope range: 12 to 20 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi—0 to 5 inches; very dark gravish brown slightly decomposed plant material, high permeability A-5 to 9 inches; gravish brown silt loam, moderately high permeability Bw-9 to 16 inches; light olive brown silt loam, moderately high permeability C-16 to 72 inches; dark brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Chatanika and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave Slope range: 12 to 20 percent Parent material: colluvium and/or loess Depth to permafrost: 12 to 39 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: very high Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May— 0 inches; June-Sept.—8 inches Ponding: frequent Available water capacity (approximate): 4.3 inches Vegetation: black spruce forest Representative Profile: Oi—0 to 4 inches; grayish brown mottled slightly decomposed plant material, high permeability A—4 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability

C/Ag—6 to 21 inches; grayish brown mottled silt loam, moderately high permeability

Cfg—21 to 72 inches; grayish brown mottled permanently frozen material, impermeable

Minor Components

Minto, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit

Chatanika, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, excess slope

149—Mosquito mucky peat

Elevation: 397 to 951 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Mosquito and Similar Soils

Extent: 70 to 90 percent of the map unit Landform: depressions on alluvial flats Slope shape: linear, concave Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 14 to 31 inches Hazard of erosion (organic mat removed): by water—slight; by wind—slight Runoff: high Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 4.1 inches *Vegetation:* black spruce and tamarack woodland *Representative Profile:*

- Oi—0 to 18 inches; dark grayish brown peat, high permeability
- Cg—18 to 24 inches; black very fine sandy loam, moderately high permeability
- Cfg—24 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 10 percent of the map unit

- Bradway and similar soils: 0 to 10 percent of the map unit
- Liscum and similar soils: 0 to 5 percent of the map unit

Water: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

150—Mosquito-Noonku complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Mosquito and Similar Soils

Extent: 30 to 50 percent of the map unit Landform: depressions on alluvial flats Slope shape: linear, concave Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 14 to 31 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: high Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.-0 inches Ponding: frequent Available water capacity (approximate): 4.1 inches Representative Profile: Oi-0 to 18 inches; black peat, high permeability Cq—18 to 24 inches; dark gravish brown very fine sandy loam, moderately high permeability Cfg-24 to 72 inches; black permanently frozen material, impermeable

Noonku and Similar Soils

- Extent: 30 to 50 percent of the map unit Landform: sloughs Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: very poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub Representative Profile: Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high permeability A-2 to 6 inches; dark brown silt loam, moderately high permeability Cq1-6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability
 - 2Cg2—47 to 72 inches; very dark brown very gravelly sand, high permeability

Minor Components

- Bradway and similar soils: 0 to 10 percent of the map unit
- North Pole and similar soils: 0 to 10 percent of the map unit
- Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

151—Noonku very fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Noonku and Similar Soils

Extent: 75 to 85 percent of the map unit *Landform:* sloughs

Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: very poorly drained Flooding: occasional Depth to high water table (approximate): April-May— 0 inches; June-Sept.—0 to 8 inches Ponding: frequent Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub Representative Profile:

Slope shape: concave

- Oe—0 to 2 inches; dark brown moderately decomposed plant material, moderately high permeability
- A—2 to 6 inches; very dark brown silt loam, moderately high permeability
- Cg1—6 to 47 inches; gray stratified sand to fine sand to very fine sandy loam, moderately high permeability
- 2Cg2—47 to 72 inches; dark brown very gravelly sand, high permeability

Minor Components

Liscum and similar soils: 0 to 5 percent of the map unit

- North Pole and similar soils: 0 to 10 percent of the map unit
- Tanacross and similar soils: 0 to 5 percent of the map unit
- Tanana and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

152—North Pole fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

North Pole and Similar Soils

Extent: 75 to 90 percent of the map unit *Landform:* alluvial flats *Slope shape:* linear *Slope range:* 0 to 2 percent Parent material: alluvium

Hazard of erosion (organic mat removed): by

water—slight; by wind—severe

Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland Representative Profile:

- Oi—0 to 2 inches; dark brown slightly decomposed plant material, high permeability
- Oa—2 to 4 inches; grayish brown highly decomposed plant material, moderately low permeability
- Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability
- 2C—39 to 72 inches; dark yellowish brown and dark gray very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Tanana and similar soils: 0 to 10 percent of the map unit

- Mosquito and similar soils: 0 to 10 percent of the map unit
- Noonku and similar soils: 0 to 5 percent of the map unit
- Eielson and similar soils: 0 to 5 percent of the map unit

Liscum and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

153—North Pole-Mosquito-Liscum complex

Elevation: 397 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

North Pole and Similar Soils

Extent: 20 to 55 percent of the map unit *Landform:* alluvial flats

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: alluvium

Hazard of erosion (organic mat removed): by

water-slight; by wind-severe

Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland Representative Profile:

- Oi—0 to 2 inches; dark yellowish brown and dark gray slightly decomposed plant material, high permeability
- Oa—2 to 4 inches; black highly decomposed plant material, moderately low permeability
- Bg—4 to 39 inches; dark brown stratified fine sand to silt loam, moderately high permeability
- 2C—39 to 72 inches; grayish brown very gravelly sand, high permeability
- *Note:* This soil has 10 to 40 inches of loamy material over sand and gravel.

Mosquito and Similar Soils

Extent: 20 to 40 percent of the map unit Landform: depressions on alluvial flats Slope shape: linear, concave Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 14 to 31 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: high Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland Representative Profile: Oi-0 to 18 inches; black peat, high permeability Cg—18 to 24 inches; dark gravish brown very fine sandy loam, moderately high permeability Cfg-24 to 72 inches; black permanently frozen material, impermeable

Liscum and Similar Soils

Extent: 15 to 25 percent of the map unit

Landform: alluvial flats

- Slope shape: linear
- Slope range: 0 to 2 percent
- Parent material: alluvium
- Hazard of erosion (organic mat removed): by
- water-slight; by wind-slight

Runoff: negligible

Drainage class: very poorly drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 4 inches

Ponding: frequent

- Available water capacity (approximate): 11.9 inches Vegetation: sedges and grasses
- Representative Profile:
 - Oi—0 to 3 inches; olive brown and gray peat, high permeability
 - Oa—3 to 11 inches; olive brown muck, moderately low permeability
 - A—11 to 15 inches; very dark grayish brown mucky silt loam, moderately high permeability
 - Bg—15 to 70 inches; black stratified silt loam to loamy fine sand, moderately high permeability C—70 to 72 inches; dark brown gravelly sandy
 - loam, high permeability
- Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Histels and similar soils: 0 to 10 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action, permafrost

154—North Pole-Noonku complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

North Pole and Similar Soils

Extent: 50 to 65 percent of the map unit *Landform:* alluvial flats *Slope shape:* linear *Slope range:* 0 to 2 percent *Parent material:* alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches

Ponding: frequent

Available water capacity (approximate): 8.2 inches Vegetation: black spruce and tamarack woodland Representative Profile:

- Oi—0 to 2 inches; grayish brown slightly decomposed plant material, high permeability
- Oa—2 to 4 inches; dark yellowish brown and dark gray highly decomposed plant material, moderately low permeability
- Bg—4 to 39 inches; black stratified fine sand to silt loam, moderately high permeability
- 2C—39 to 72 inches; dark brown very gravelly sand, high permeability
- Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Noonku and Similar Soils

- Extent: 15 to 35 percent of the map unit Landform: sloughs Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: very poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 9.2 inches Vegetation: alder, willow, and bog birch scrub Representative Profile: Oe-0 to 2 inches; gray moderately decomposed plant material, moderately high permeability A-2 to 6 inches; dark brown silt loam, moderately high permeability Cg1-6 to 47 inches; very dark brown stratified sand to fine sand to very fine sandy loam, moderately high permeability
 - 2Cg2—47 to 72 inches; gray very gravelly sand, high permeability

Minor Components

Bradway and similar soils: 0 to 10 percent of the map unit

Eielson and similar soils: 0 to 5 percent of the map unit

Piledriver and similar soils: 0 to 5 percent of the map unit

Tanana and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

155—Peede silt loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Peede and Similar Soils

Extent: 60 to 90 percent of the map unit Landform: depressions on flood plains Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 14.6 inches Vegetation: grasses and sedges Representative Profile: Oe—0 to 2 inches; very dark brown moderately decomposed plant material, moderately high permeability

Cg—2 to 72 inches; dark gray silt loam, moderately high permeability

Minor Components

Mosquito and similar soils: 5 to 25 percent of the map unit

Liscum and similar soils: 0 to 15 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, frost action

156—Peede-Mosquito complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Peede and Similar Soils

Extent: 60 to 80 percent of the map unit Landform: depressions on flood plains Slope shape: concave Slope range: 0 to 1 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 8 inches Ponding: frequent Available water capacity (approximate): 14.6 inches Vegetation: grasses and sedges Representative Profile: Oe-0 to 2 inches; dark gray moderately decomposed plant material, moderately high permeability Cg-2 to 72 inches; very dark brown silt loam, moderately high permeability

Mosquito and Similar Soils

Extent: 20 to 30 percent of the map unit Landform: depressions on alluvial flats Slope shape: linear, concave Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 14 to 31 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: high Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.-0 inches Ponding: frequent Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland Representative Profile: Oi-0 to 18 inches; dark gravish brown peat, high permeability Cg-18 to 24 inches; black very fine sandy loam, moderately high permeability

Cfg-24 to 72 inches; dark grayish brown

permanently frozen material, impermeable

Minor Components

Liscum and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

157—Piledriver very fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Piledriver and Similar Soils

Extent: 70 to 90 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.-47 inches Ponding: frequent Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile: Oi-0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability C2—15 to 33 inches; grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability 2C3-33 to 72 inches; light olive brown and

grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 5 to 15 percent of the map unit

Fubar and similar soils: 5 to 10 percent of the map unit

Tanana and similar soils: 0 to 5 percent of the map unit

North Pole and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, permeability, flooding

158—Piledriver-Eielson complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Piledriver and Similar Soils

Extent: 45 to 60 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.-47 inches Ponding: frequent Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability C1-3 to 15 inches; dark olive brown very fine sandy loam, moderately high permeability C2-15 to 33 inches: light olive brown and gravish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability 2C3-33 to 72 inches; grayish brown very gravelly sand, high permeability

Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Eielson and Similar Soils

Extent: 30 to 40 percent of the map unit *Landform:* flood plains

Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: somewhat poorly drained Flooding: occasional Depth to high water table (approximate): April-May-0 inches; June-Sept.-47 inches Ponding: frequent Available water capacity (approximate): 12.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile: Oi-0 to 2 inches; very dark brown slightly decomposed plant material, high permeability O/C-2 to 49 inches; dark gravish brown very fine sandy loam, moderately high permeability C1-49 to 71 inches; olive brown and dark gray stratified silt loam to fine sand, moderately high permeability 2C2-71 to 72 inches; very dark brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Fubar and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 10 percent of the map unit

Riverwash: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: water table, ponding, flooding, permeability, sand and gravel, frost action

159—Piledriver-Fubar complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Piledriver and Similar Soils

Extent: 40 to 50 percent of the map unit *Landform:* flood plains *Slope shape:* linear *Slope range:* 0 to 2 percent *Parent material:* alluvium *Hazard of erosion (organic mat removed):* by water—slight; by wind—severe Runoff: negligible

Drainage class: somewhat poorly drained

Flooding: rare

Depth to high water table (approximate): April-May— 0 inches; June-Sept.—47 inches

Ponding: frequent

Available water capacity (approximate): 7.3 inches Vegetation: white spruce and balsam poplar forest Representative Profile:

Oi—0 to 3 inches; dark olive brown slightly decomposed plant material, high permeability

C1—3 to 15 inches; dark brown very fine sandy loam, moderately high permeability

C2—15 to 33 inches; light olive brown and grayish brown stratified sand to fine sand to very fine sandy loam, moderately high permeability

- 2C3—33 to 72 inches; grayish brown very gravelly sand, high permeability
- Note: This soil has 10 to 40 inches of loamy material over sand and gravel.

Fubar and Similar Soils

Extent: 40 to 50 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: moderately well drained Flooding: rare Depth to high water table (approximate): April-Sept.-54 inches Ponding: none Available water capacity (approximate): 3.4 inches Vegetation: white spruce, balsam poplar, and paper birch forest Representative Profile: Oi-0 to 2 inches; dark brown slightly decomposed plant material, high permeability C1-2 to 10 inches; dark grayish brown stratified fine sand to silt loam, moderately high permeability

2C2—10 to 72 inches; dark gray very gravelly coarse sand, high permeability

Note: This soil has 1 to 10 inches of loamy material over sand and gravel.

Minor Components

Eielson and similar soils: 0 to 10 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permeability, sand and gravel

160—Pits, gravel

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Pits, gravel

Extent: 100 percent of the map unit *Landform:* gravel pits *Slope shape:* convex, concave, linear *Slope range:* 0 to 60 percent

161—Pits, quarry

Elevation: 1,476 to 3,264 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Pits, quarry

Extent: 100 percent of the map unit *Landform:* quarries *Slope shape:* concave, convex, linear *Slope range:* 0 to 100 percent *Vegetation:* none, or sparse herbaceous vegetation and willows

162—Riverwash

Elevation: 397 to 1,640 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 75 to 104 days

Riverwash

Extent: 100 percent of the map unit *Landform:* flood plains *Slope shape:* linear

Slope range: 0 to 2 percent

163—Salchaket very fine sandy loam

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Salchaket and Similar Soils

Extent: 80 to 90 percent of the map unit Landform: flood plains Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium Hazard of erosion (organic mat removed): by water-slight; by wind-severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches Ponding: frequent Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper birch forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability C1—3 to 24 inches; olive brown very fine sandy loam, moderately high permeability C2-24 to 45 inches; dark gravish brown stratified silt loam to fine sand, moderately high permeability 2C3-45 to 72 inches; variegated very gravelly sand, high permeability Note: This soil has more than 40 inches of loamy material over sand and gravel.

Minor Components

Jarvis and similar soils: 5 to 10 percent of the map unit Tanana and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: flooding, ponding

164—Salchaket-Typic Cryorthents complex

Elevation: 397 to 1,299 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Salchaket and Similar Soils

Extent: 40 to 50 percent of the map unit *Landform:* flood plains *Slope shape:* linear *Slope range:* 0 to 2 percent *Parent material:* alluvium *Hazard of erosion (organic mat removed):* by water—slight: by wind—severe

Runoff: negligible

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.—more than 72 inches

Ponding: frequent

Available water capacity (approximate): 9.7 inches Vegetation: white spruce, balsam poplar, and paper

birch forest Representative Profile:

- Oi—0 to 3 inches; dark brown slightly decomposed plant material, high permeability
- C1—3 to 24 inches; variegated very fine sandy loam, moderately high permeability
- C2—24 to 45 inches; dark grayish brown stratified silt loam to fine sand, moderately high permeability
- 2C3—45 to 72 inches; olive brown very gravelly sand, high permeability

Note: This soil has more than 40 inches of loamy material over sand and gravel.

Typic Cryorthents and Similar Soils

Extent: 30 to 40 percent of the map unit Landform: flood plains, terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: gravelly fill over alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 7.7 inches Vegetation: seeded or planted grasses, shrubs, or trees

Representative Profile:

- C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability
- 2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability
 2C2—63 to 72 inches; light brownish gray very

gravelly sand, high permeability

Minor Components

Jarvis and similar soils: 0 to 15 percent of the map unit

Fubar and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: high gravel content, flooding, ponding

165—Saulich peat, 3 to 7 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit Landform: valley sides Slope shape: concave, linear Slope range: 3 to 7 percent Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss Representative Profile: Oi-0 to 16 inches; black and dark brown peat, high permeability Bg/A-16 to 21 inches; dark gravish brown

mucky silt loam, moderately high permeability Cfg—21 to 72 inches; very dark brown permanently frozen material, impermeable

Minor Components

- Goldstream and similar soils: 3 to 10 percent of the map unit
- Saulich, slopes less than 3 percent, and similar soils: 3 to 10 percent of the map unit
- Saulich, slopes more than 7 percent, and similar soils: 3 to 10 percent of the map unit
- Chatanika and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action

166—Saulich peat, 7 to 12 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Saulich and Similar Soils

Extent: 75 to 85 percent of the map unit Landform: valley sides Slope shape: concave, linear Slope range: 7 to 12 percent Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss Representative Profile: Oi-0 to 16 inches; very dark brown peat, high permeability Bg/A—16 to 21 inches; dark gravish brown mucky silt loam, moderately high permeability

Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

- Goldstream and similar soils: 3 to 10 percent of the map unit
- Saulich, slopes less than 7 percent, and similar soils: 3 to 5 percent of the map unit
- Saulich, slopes more than 12 percent, and similar soils: 3 to 5 percent of the map unit

Chatanika and similar soils: 0 to 5 percent of the map unit

Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

167—Saulich peat, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Saulich and Similar Soils

Extent: 70 to 85 percent of the map unit Landform: valley sides Slope shape: concave, linear Slope range: 12 to 20 percent Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Floodina: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss Representative Profile: Oi-0 to 16 inches; very dark brown peat, high permeability Bg/A-16 to 21 inches; dark gravish brown mucky silt loam, moderately high permeability

Cfg—21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minor Components

Ester and similar soils: 0 to 7 percent of the map unit Goldstream and similar soils: 5 to 10 percent of the map unit

- Saulich, slopes less than 12 percent, and similar soils: 5 to 10 percent of the map unit
- Saulich, slopes more than 20 percent, and similar soils: 5 to 10 percent of the map unit
- Chatanika and similar soils: 0 to 5 percent of the map unit
- Minto and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

168—Saulich-Minto complex, 3 to 12 percent slopes

Elevation: 499 to 1,998 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit Landform: valley sides Slope shape: concave, linear Slope range: 3 to 12 percent Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss Representative Profile: Oi-0 to 16 inches; dark gravish brown peat, high permeability Bg/A-16 to 21 inches; black and dark brown mucky silt loam, moderately high permeability Cfg-21 to 72 inches; very dark brown

permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit Landform: hills Position on slope: footslopes, toeslopes Slope shape: linear, concave, convex Slope range: 3 to 12 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi—0 to 5 inches; dark brown slightly decomposed plant material, high permeability A-5 to 9 inches; light olive brown silt loam, moderately high permeability Bw-9 to 16 inches; very dark gravish brown silt loam, moderately high permeability C-16 to 72 inches; gravish brown silt loam, moderately high permeability

Note: Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit

- Saulich, slopes less than 7 percent, and similar soils: 2 to 10 percent of the map unit
- Minto, slopes less than 7 percent, and similar soils: 2 to 7 percent of the map unit
- Saulich, slopes more than 12 percent, and similar soils: 2 to 7 percent of the map unit
- Chatanika and similar soils: 0 to 10 percent of the map unit
- Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

169—Saulich-Minto complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet

Mean annual precipitation: 10 to 14 inches *Frost-free period:* 80 to 120 days

Saulich and Similar Soils

Extent: 30 to 45 percent of the map unit Landform: valley sides Slope shape: concave, linear Slope range: 12 to 20 percent Parent material: colluvium and/or loess Depth to permafrost: 14 to 24 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: very high Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-8 inches Ponding: frequent Available water capacity (approximate): 3.6 inches Vegetation: black spruce forest with low shrubs and moss Representative Profile: Oi-0 to 16 inches; very dark brown peat, high permeability Bg/A—16 to 21 inches; dark gravish brown mucky silt loam, moderately high permeability Cfg-21 to 72 inches; black and dark brown permanently frozen material, impermeable

Minto and Similar Soils

Extent: 30 to 45 percent of the map unit Landform: hills Position on slope: toeslopes, footslopes Slope shape: linear, concave, convex Slope range: 12 to 20 percent Parent material: loess Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: moderately well drained Flooding: none Depth to high water table (approximate): April-May-4 to 8 inches; June-Sept.-more than 72 inches Ponding: none Available water capacity (approximate): 12.6 inches Vegetation: paper birch and white spruce forest Representative Profile: Oi-0 to 5 inches; light olive brown slightly decomposed plant material, high permeability A-5 to 9 inches; dark brown silt loam, moderately high permeability

Bw—9 to 16 inches; very dark grayish brown silt loam, moderately high permeability

C—16 to 72 inches; grayish brown silt loam, moderately high permeability *Note:* Permafrost is usually present at some depth below the soil profile.

Minor Components

Minto, slopes less than 12 percent, and similar soils: 0 to 7 percent of the map unit

Minto, slopes more than 20 percent, and similar soils: 0 to 7 percent of the map unit

Saulich, slopes more than 20 percent, and similar soils: 0 to 7 percent of the map unit

Chatanika and similar soils: 0 to 7 percent of the map unit

Saulich, slopes less than 12 percent, and similar soils: 0 to 7 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit Goldstream and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, frost action, excess slope

170—Steese silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 75 to 85 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 3 to 7 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-moderate; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi—0 to 2 inches; light olive brown slightly decomposed plant material, high permeability

- A—2 to 5 inches; brown silt loam, moderately high permeability
- Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
- 2C—27 to 33 inches; light olive brown very channery silt loam, high permeability
 2Cr—33 to 72 inches; light olive brown weathered bedrock

Minor Components

Steese, slopes more than 7 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the map unit

Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: bedrock

171—Steese silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 70 to 80 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 7 to 12 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Pondina: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

- Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
- A-2 to 5 inches; dark brown silt loam, moderately high permeability
- Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
- 2C-27 to 33 inches; brown very channery silt loam, high permeability

2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 12 percent, and similar soils: 2 to 10 percent of the map unit

Fairbanks and similar soils: 2 to 10 percent of the map unit

Gilmore and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

172—Steese silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 60 to 75 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and guaking aspen forest

Representative Profile:

- Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
- A—2 to 5 inches; dark brown silt loam, moderately high permeability
- Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
- 2C—27 to 33 inches; brown very channery silt loam, high permeability

2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes more than 20 percent, and similar soils: 2 to 10 percent of the map unit

- Fairbanks and similar soils: 2 to 10 percent of the map unit
- Gilmore and similar soils: 2 to 10 percent of the map unit

Steese, slopes less than 12 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock substratum

173—Steese silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 70 to 85 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 20 to 30 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe *Runoff:* high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

Oi-0 to 2 inches; dark brown slightly

- decomposed plant material, high permeability A-2 to 5 inches; brown silt loam, moderately high permeability
- Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
- 2C—27 to 33 inches; dark brown very channery silt loam, high permeability
- 2Cr—33 to 72 inches; dark brown weathered bedrock

Minor Components

Steese, slopes more than 30 percent, and similar soils: 2 to 10 percent of the map unit

- Gilmore and similar soils: 2 to 10 percent of the map unit
- Steese, slopes less than 20 percent, and similar soils: 2 to 10 percent of the map unit
- Fairbanks and similar soils: 2 to 10 percent of the map unit
- Ester and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

174—Steese silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 80 to 95 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 30 to 45 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

- Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
- A—2 to 5 inches; dark brown silt loam, moderately high permeability
- Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
- 2C—27 to 33 inches; brown very channery silt loam, high permeability
- 2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Steese, slopes less than 30 percent, and similar soils: 5 to 15 percent of the map unit

Gilmore and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

175—Steese silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 85 to 95 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: linear, convex Slope range: 45 to 70 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches

- Vegetation: paper birch, white spruce, and quaking aspen forest
- Representative Profile:
 - Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
 - A-2 to 5 inches; dark brown silt loam, moderately high permeability
 - Bw—5 to 27 inches; light olive brown silt loam, moderately high permeability
 - 2C—27 to 33 inches; brown very channery silt loam, high permeability
 - 2Cr-33 to 72 inches; brown weathered bedrock

Minor Components

Gilmore and similar soils: 0 to 10 percent of the map unit

Steese, slopes less than 45 percent, and similar soils: 5 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

176—Steese-Gilmore complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and guaking aspen forest

Representative Profile:

- Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
- A—2 to 5 inches; light olive brown silt loam, moderately high permeability
- Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
- 2C—27 to 33 inches; brown very channery silt loam, high permeability
- 2Cr-33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 20 to 40 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 12 to 20 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: medium Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches: olive brown silt loam. moderately high permeability Bw-6 to 12 inches; yellowish brown silt loam, moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability 2Cr-19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 12 percent, and similar soils: 5 to 15 percent of the map unit Steese, slopes more than 20 percent, and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

177—Steese-Gilmore complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 20 to 30 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and guaking aspen forest Representative Profile: Oi-0 to 2 inches; brown slightly decomposed plant material, high permeability A-2 to 5 inches; dark brown silt loam, moderately high permeability Bw-5 to 27 inches; light olive brown silt loam, moderately high permeability 2C-27 to 33 inches; brown very channery silt loam, high permeability 2Cr—33 to 72 inches; brown weathered bedrock Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 20 to 30 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: high Drainage class: well drained Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; olive brown slightly decomposed plant material, high permeability A-3 to 6 inches; dark brown silt loam, moderately high permeability Bw-6 to 12 inches; yellowish brown silt loam, moderately high permeability 2BC-12 to 19 inches; olive brown very channery silt loam, high permeability 2Cr-19 to 72 inches; olive brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 20 percent, and similar soils: 2 to 15 percent of the map unit Steese, slopes less than 20 percent, and similar soils: 2 to 12 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

178—Steese-Gilmore complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 30 to 60 percent of the map unit Landform: hills Position on slope: backslopes, shoulders Slope shape: convex, linear Slope range: 30 to 45 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water—severe; by wind—severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:

- Oi—0 to 2 inches; brown slightly decomposed plant material, high permeability
- A—2 to 5 inches; light olive brown silt loam, moderately high permeability
- Bw—5 to 27 inches; dark brown silt loam, moderately high permeability
- 2C—27 to 33 inches; brown very channery silt loam, high permeability
- 2Cr-33 to 72 inches; brown weathered bedrock

Gilmore and Similar Soils

Extent: 30 to 50 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 30 to 45 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches; yellowish brown silt loam, moderately high permeability Bw-6 to 12 inches; olive brown silt loam, moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability 2Cr-19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 30 percent, and similar soils: 5 to 15 percent of the map unit Steese, slopes more than 45 percent, and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

179—Steese-Gilmore complex, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Steese and Similar Soils

Extent: 40 to 60 percent of the map unit Landform: hills Position on slope: shoulders, backslopes Slope shape: convex, linear Slope range: 45 to 70 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 20 to 40 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe *Runoff:* high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 6.1 inches Vegetation: paper birch, white spruce, and guaking aspen forest Representative Profile: Oi-0 to 2 inches; light olive brown slightly decomposed plant material, high permeability A-2 to 5 inches; brown silt loam, moderately high permeability Bw-5 to 27 inches; dark brown silt loam, moderately high permeability 2C-27 to 33 inches; light olive brown very channery silt loam, high permeability 2Cr-33 to 72 inches; light olive brown weathered bedrock

Gilmore and Similar Soils

Extent: 40 to 60 percent of the map unit Landform: hills Position on slope: summits, backslopes Slope shape: linear, convex Slope range: 45 to 70 percent Parent material: loess over residuum weathered from schist Depth to bedrock (paralithic): 13 to 24 inches Hazard of erosion (organic mat removed): by water-severe; by wind-severe Runoff: high Drainage class: well drained Flooding: none Depth to high water table (approximate): April-Sept.—more than 72 inches Ponding: none Available water capacity (approximate): 2.9 inches Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest Representative Profile: Oi-0 to 3 inches; dark brown slightly decomposed plant material, high permeability A-3 to 6 inches; yellowish brown silt loam, moderately high permeability Bw-6 to 12 inches: olive brown silt loam. moderately high permeability 2BC-12 to 19 inches; dark brown very channery silt loam, high permeability 2Cr—19 to 72 inches; dark brown weathered bedrock, high permeability

Minor Components

Gilmore, slopes less than 45 percent, and similar soils: 2 to 10 percent of the map unit Steese, slopes less than 45 percent, and similar soils: 2 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope, bedrock

180—Tanacross peat

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Tanacross and Similar Soils

Extent: 85 to 95 percent of the map unit Landform: alluvial flats Slope shape: linear Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 10 to 28 inches Hazard of erosion (organic mat removed): by water—slight; by wind—slight Runoff: high Drainage class: poorly drained Flooding: rare

Depth to high water table (approximate): April-

Sept.—0 inches

Ponding: frequent

Available water capacity (approximate): 3.0 inches Vegetation: black spruce woodland

Representative Profile:

- Oi—0 to 9 inches; dark brown peat, high permeability
- A—9 to 11 inches; dark gray and dark yellowish brown mucky silt loam, moderately high permeability
- Bjjg—11 to 17 inches; black stratified fine sandy loam to silt loam, moderately high permeability
- Bjjfg—17 to 72 inches; dark brown permanently frozen material, impermeable

Minor Components

Tanana and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, thermokarst, water table, ponding, flooding, frost action

181—Tanana mucky silt loam

Elevation: 397 to 951 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Tanana and Similar Soils

Extent: 60 to 85 percent of the map unit Landform: terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium and/or loess over alluvium Depth to permafrost: 16 to 47 inches Hazard of erosion (organic mat removed): by water—slight; by wind—slight Runoff: high Drainage class: poorly drained Flooding: rare

Depth to high water table (approximate): April-May-0 inches; June-Sept.—6 to 12 inches Ponding: frequent Available water capacity (approximate): 5.2 inches Vegetation: black spruce forest

Representative Profile:

- Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability
- A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability Bijq—6 to 25 inches; very dark brown very fine
- sandy loam, moderately high permeability
- Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Minor Components

Bolio and similar soils: 0 to 5 percent of the map unit Jarvis and similar soils: 2 to 5 percent of the map unit

- Noonku and similar soils: 3 to 5 percent of the map unit
- Salchaket and similar soils: 5 to 10 percent of the map unit
- Tanacross and similar soils: 5 to 15 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, flooding, frost action

182—Tanana-Mosquito complex

Elevation: 397 to 650 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Tanana and Similar Soils

Extent: 50 to 70 percent of the map unit Landform: terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: alluvium and/or loess over alluvium Depth to permafrost: 16 to 47 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: high Drainage class: poorly drained Flooding: rare Depth to high water table (approximate): April-May-0 inches; June-Sept.-6 to 12 inches Pondina: frequent Available water capacity (approximate): 5.2 inches Vegetation: black spruce forest

Representative Profile:
Oi—0 to 3 inches; dark grayish brown slightly decomposed plant material, high permeability
A—3 to 6 inches; very dark grayish brown mucky silt loam, moderately high permeability
Bjjg—6 to 25 inches; very dark brown very fine sandy loam, moderately high permeability
Cjjfg—25 to 72 inches; dark grayish brown permanently frozen material, impermeable

Mosquito and Similar Soils

Extent: 20 to 25 percent of the map unit Landform: depressions on alluvial flats Slope shape: linear, concave Slope range: 0 to 2 percent Parent material: organic material over alluvium Depth to permafrost: 14 to 31 inches Hazard of erosion (organic mat removed): by water-slight; by wind-slight *Runoff:* high Drainage class: very poorly drained Flooding: rare Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 4.1 inches Vegetation: black spruce and tamarack woodland Representative Profile: Oi-0 to 18 inches; black peat, high permeability Cg-18 to 24 inches; dark gravish brown verv

Cg—18 to 24 inches; dark grayish brown very fine sandy loam, moderately high permeability Cfg—24 to 72 inches; black permanently frozen material, impermeable

Minor Components

Jarvis and similar soils: 5 to 15 percent of the map unit

Liscum and similar soils: 0 to 5 percent of the map unit

Noonku and similar soils: 0 to 5 percent of the map unit

Management Considerations

Soil-related factors: flooding, water table, ponding, permafrost, frost action

183—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils

Elevation: 397 to 1,201 feet *Mean annual precipitation:* 10 to 14 inches

Frost-free period: 80 to 120 days

Typic Cryaquents and Similar Soils

Extent: 0 to 90 percent of the map unit Landform: depressions on terraces Slope shape: concave Slope range: 0 to 5 percent Parent material: lacustrine silt or loess Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: low Drainage class: poorly drained Flooding: frequent Depth to high water table (approximate): April-Sept.-0 inches Ponding: frequent Available water capacity (approximate): 13.9 inches Vegetation: sedges, grasses, and low shrubs Representative Profile: Oe-0 to 6 inches; dark yellowish brown moderately decomposed plant material, moderately high permeability

Cg—6 to 72 inches; dark gray and dark grayish brown silt loam, moderately high permeability

Histic Cryaquepts and Similar Soils

Extent: 20 to 50 percent of the map unit Landform: depressions on terraces Slope shape: concave Slope range: 0 to 3 percent Parent material: organic material over loess Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: poorly drained Flooding: none Depth to high water table (approximate): April-May-0 inches; June-Sept.-0 to 16 inches Ponding: frequent Available water capacity (approximate): 11.8 inches Vegetation: sedges, grasses, and low shrubs Representative Profile: Oa-0 to 13 inches; dark grayish brown muck, high permeability C-13 to 30 inches; olive brown silt loam, moderately high permeability

Cg—30 to 72 inches; very dark brown silt loam, moderately high permeability

Terric Cryofibrists and Similar Soils

Extent: 0 to 80 percent of the map unit *Landform:* thermokarst depressions

Slope shape: concave Slope range: 0 to 1 percent Parent material: organic material over lacustrine deposits and/or loess Hazard of erosion (organic mat removed): by water-slight; by wind-slight Runoff: negligible Drainage class: very poorly drained Flooding: none Depth to high water table (approximate): April-Sept.—0 inches Ponding: frequent Available water capacity (approximate): 15.0 inches Vegetation: sedges Representative Profile: Oi—0 to 28 inches; black peat, high permeability Oa-28 to 40 inches; very dark brown muck, moderately low permeability

Cg—40 to 72 inches; black silty clay loam, moderately high permeability

Minor Components

Histels and similar soils: 0 to 50 percent of the map unit Water: 0 to 20 percent of the map unit

Management Considerations

Soil-related factors: permafrost, water table, ponding, excess organic matter, thermokarst, frost action

184—Typic Cryorthents, pit spoil

Elevation: 397 to 1,299 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Typic Cryorthents and Similar Soils

Extent: 75 to 95 percent of the map unit Landform: flood plains, terraces Slope shape: linear Slope range: 0 to 7 percent Parent material: mine spoil over alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 10.9 inches Vegetation: paper birch and balsam poplar forest and alder scrub

Representative Profile:

- Oi—0 to 1 inch; light olive brown mottled slightly decomposed plant material, high permeability
- C1—1 to 49 inches; dark brown stratified fine sand to silt loam, moderately high permeability
- 2C2—49 to 72 inches; grayish brown very gravelly sand, high permeability
- *Note:* This soil occurs on highly irregular topography consisting of small (3 to 15 feet), man-made hills with steep slopes.

Minor Components

- Fubar and similar soils: 0 to 10 percent of the map unit
- Jarvis and similar soils: 0 to 10 percent of the map unit
- Piledriver and similar soils: 0 to 10 percent of the map unit
- Salchaket and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: excess slope

185—Typic Cryorthents-Urban land complex

Elevation: 397 to 1,299 feet *Mean annual precipitation:* 10 to 14 inches *Frost-free period:* 80 to 120 days

Typic Cryorthents, fill, and Similar Soils

Extent: 40 to 60 percent of the map unit Landform: flood plains, terraces Slope shape: linear Slope range: 0 to 2 percent Parent material: gravelly fill over alluvium Hazard of erosion (organic mat removed): by water—slight; by wind—severe Runoff: negligible Drainage class: well drained Flooding: rare Depth to high water table (approximate): April-Sept.—more than 72 inches

Ponding: none

Available water capacity (approximate): 7.7 inches Vegetation: seeded or planted grasses, shrubs, or trees

Representative Profile:

- C—0 to 30 inches; light brownish gray stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high permeability
- 2C1—30 to 63 inches; light olive brown stratified fine sand to silt loam, high permeability
- 2C2—63 to 72 inches; light brownish gray very gravelly sand, high permeability

Urban land

Extent: 30 to 60 percent of the map unit *Landform:* urban land

Slope shape: convex, linear

Slope range: 0 to 2 percent

Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of urban areas.

Minor Components

- Salchaket and similar soils: 0 to 15 percent of the map unit
- Jarvis and similar soils: 0 to 10 percent of the map unit

Fubar and similar soils: 0 to 10 percent of the map unit

Management Considerations

Soil-related factors: high gravel content, permeability, flooding

186—Urban land

Elevation: 397 to 853 feet *Mean annual precipitation:* 10 to 14 inches

Urban land

Extent: 100 percent of the map unit Landform: urban land Slope shape: convex, linear Slope range: 0 to 2 percent Note: Urban land is mostly covered by streets, parking lots, buildings, and other structures of urban areas.

187—Water

Water

Extent: 100 percent of the map unit *Landform:* lakes

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained 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 particle-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 are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Tables 5 and 6 give the engineering index properties and particle size data for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the USDA. 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 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Table 5 shows the engineering classifications and the range of index properties for the layers of

each soil in the survey area.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle size distribution of the fraction less than 3 inches (75 mm) 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, SP-SM.

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 (75 mm) in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-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.

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.

Table 6 gives particle size data for each soil in the survey area.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) 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 (75 mm) 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.

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. 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. 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. 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.

The estimates of particle-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 generally omitted in the table.

Physical Properties

Table 7 shows estimates of some physical 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.

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 $\frac{1}{3}$ or $\frac{1}{10}$ -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 refers to the ability of a soil to transmit water or air. 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. *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 7, 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 7 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.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soils are grouped according to the amount of stable aggregates more than 0.84 millimeter in size. Soils containing rock fragments can occur in any group. The groups are as follows:

- 1. 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 25 to 39 percent dry soil aggregates with > 35 percent clay or > 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
- 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
- 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
- 50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
- 8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 8 shows estimates of some 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.

Cation-exchange capacity is the total amount of extractable bases 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. Soils having a low cationexchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It

is determined for soils that have pH of less than 5.5.

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.

Water Features

Table 9 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.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

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.

Local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods is also considered. 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.

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 9 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).

Moisture status indicates the water content in the soil at a specified depth. The Status is expressed as wet, moist, or dry. Wet refers to soil in which most of the pore space is filled with water and the water is retained at less than 0.00001 bar suction. Moist refers to soil in which some of the pore space is filled with water and the water is retained at between 0.00001 and 15 bar suction. Dry refers to soil with little to no water in the pore spaces. Any water is retained at greater than 15 bar suction, which is generally near or above the wilting point of common agricultural crops. Frozen is used to indicate that the temperature of the soil layer is below the freezing point of water.

Soil Features

Table 10 gives estimates of various soilfeatures. The estimates are used in land useplanning 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 of the restrictive layer which significantly affects 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, clavey 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. Potential for frost action is expressed as low, moderate, or high.

Risk of corrosion pertains to potential soilinduced 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.

Use and Management of the Soil

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, foresters, botanists, 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 rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation 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, permafrost, or unstable 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, and trails.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. The soils in each capability class or subclass is shown in table 11. 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 forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only capability class and subclass are presented for soils in Alaska.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use. There are no Class 1 soils in Alaska due to the climate.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes. 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, forestland, wildlife habitat, or recreation.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. Other tables indicate the suitability of the soils for use as source materials. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *source*, *probable source*, and *improbable source* or as *good*, *fair*, and *poor*. In some tables, *slight*, *moderate*, and *severe* are used to describe the degree to which certain soil features or site characteristics result in limitations that affect a specified use of the soil.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. The numerical ratings, as they relate to each specific interpretation, are explained in the sections

that follow.

Forest Productivity

In table 12, the potential productivity of common trees on a soil is expressed as a site index. 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. The site index is determined from height and age measurements of selected trees from stands throughout the survey area and in nearby areas with similar soils and climate. Tables and equations for determining site index are given in the appropriate publication for each major tree species (Farr, 1967; Gregory and Haack, 1965; Quenet and Manning, 1990). Site index should be used as a comparative index between soils and an approximate measure of height growth, not an absolute or expected value. The most rapid tree growth and greatest yields of a particular tree species can be expected on soils with the highest site indices.

The volume of wood fiber, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forest Management

In table 13, interpretive ratings are given for various aspects of forest management. The ratings are both verbal and numerical.

Ratings in the column *hazard of off-road or offtrail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very* severe indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Engineering

This section provides information for planning land uses related to building sites. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, and construction materials. The ratings are based on observed performance of the soils and on the estimates given under the heading Soil Properties.

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 between the surface and a depth of 5 to 7 feet (1.5 to 2.1 m). 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 particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet (1.5 to 2.1 m) of the surface, soil wetness, depth to water table, ponding, 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; 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

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 14 and 15 show the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings, local roads and streets, and shallow excavations.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is not limited (value = 0.00), no entry appears for the numerical value.

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

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 soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrinkswell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 16 and 17 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

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 4 and 6 feet (1.2 and 1.8 m) is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet (1.2 m) below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

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. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches (5 cm) per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches (102 cm), if the water table is high enough to raise the level of sewage in the lagoon, 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. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet (0.6 m) thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock, permafrost, or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet (1.8 m). For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid 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. A final cover of soil material at least 2 feet (0.6 m) thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock, permafrost, or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

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. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

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. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 18 and 19 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

In table 18 the soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

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 table 18, 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 Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In table 19 the soils are rated *good, fair,* or *poor* as potential sources of topsoil, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil or roadfill. The lower the number, the greater the limitation. Only material in suitable quantity is evaluated.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. Rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material affect the ease of excavating, loading and spreading. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

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.

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 (1.8 m) high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet (1.5 m). It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties affecting the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. Large stones, depth to a water table, and slope affect the ease of excavation. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

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* (Soil Survey Staff, 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff, 1998) and in the *Soil Survey Manual* (Soil Survey Division Staff, 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, 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 cm). 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.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in table 20. 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, 1998). Some map units consist almost entirely of hydric soils, such as map unit 101—Bolio peat (in which all listed components are hydric). Other map units consist primarily of nonhydric soils, such as map unit 118—Fairbanks silt loam, 12 to 20 percent slopes, (in which all listed components are nonhydric), or map unit 162—Salchaket fine sandy loam (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils in table 20.

Table 20 also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

1. All Histosols except Folists, or

2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:

a. somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season, or

b. poorly drained or very poorly drained and have either:

(1) a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or for other soils

(2) a frequently occurring water table at less than 1.0 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within a depth of 20 inches, or

(3) a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 inches/hour in any layer within a depth of 20 inches, or

3. Soils that are frequently ponded for a long duration or a very long duration during the growing season, or

 Soils that are frequently flooded for a long duration or a very long duration during the growing season.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 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 21 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve 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 *Inceptisol*.

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 *Cryept* (*cry*, meaning cold, plus *ept*, from *Inceptisol*).

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 *Eutrocryepts* (*Eutro* meaning high base saturation, plus *ochrept*, the cold suborder of the *Inceptisols*).

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 Eutrocryepts*.

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-silty, mixed, superactive, Typic Eutrocryepts*.

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. An example from this survey area is the *Fairbanks Series*.

Taxonomic Units and Their Morphology

In this section, the taxonomic units recognized in the survey area are described. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small threedimensional area of soil, that is typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the Soil Survey Manual (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in Soil Taxonomy (Soil Survey Staff, 1999) and in Keys to Soil Taxonomy (Soil Survey Staff, 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 taxonomic unit.

Bolio Series

Taxonomic Classification

• Euic, subgelic Typic Hemistels

Setting

Depth class: shallow or moderately deep over permafrost Drainage class: very poorly drained Landform: alluvial terraces Parent material: organic matter Slope: 0 to 2 percent Elevation: 420 to 950 feet (128 to 290 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 101—Bolio peat Location in survey area: NW¼, NW¼, Section 34, T1N, R1W, Fairbanks Meridian

Typical Pedon

- Bolio peat—on a level slope at 450 feet (137 m) elevation, under dwarf birch scrub and sedge vegetation:
- Oi—0 to 12 inches (0 to 30 cm); very dark brown (10YR 2/2) peat; many very fine to coarse roots; very strongly acid (pH 4.8); diffuse smooth boundary.
- Oe—12 to 16 inches (30 to 40 cm); black (10YR 2/1) mucky peat; few very fine and fine roots; moderately acid (pH 5.6); diffuse smooth boundary.
- Oef1—16 to 22 inches (40 to 55 cm); black (10YR 2/1) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.
- Oef2—22 to 60 inches (55 to 152 cm); dark brown (10YR 3/3) permanently frozen mucky peat; moderately acid (pH 5.8).

Range in Characteristics

Organic layer thickness: greater than 40 inches (> 102 cm)

Depth to permafrost: 14 to 28 inches (36 to 71 cm)

Oi horizon: Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 2 to 6 Reaction—extremely acid to neutral

Oe horizon:

Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2 Reaction—extremely acid to moderately acid

Oef horizon: Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2 Texture—hemic peat or stratified hemic and sapric peat Reaction—moderately or slightly acid

Cfg horizon (when present): Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2 Texture—silt loam, mucky silt loam, or peaty silty clay loam Reaction—moderately acid to neutral

Bradway Series

Taxonomic Classification

Coarse-loamy, mixed, superactive, subgelic
 Typic Aquiturbels

Setting

Depth class: shallow or moderately deep over permafrost Drainage class: poorly drained Landform: flood plains and terraces Parent material: alluvium or loess over alluvium Slope: 0 to 2 percent Elevation: 497 to 650 feet (151 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 102—Bradway very fine sandy loam

Location in survey area: SW¼, NW¼, Section 30, T1S, R1E, Fairbanks Meridian

Typical Pedon

- Bradway very fine sandy loam—on a level slope at 400 feet (122 m) elevation under birch shrub vegetation:
- Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) mat of roots and slightly decomposed plant material; very strongly acid (pH 4.6); clear smooth boundary.
- Oe—4 to 7 inches (10 to 18 cm); black (10YR 2/1) moderately decomposed plant material; strongly acid (pH 5.2); abrupt smooth boundary.
- A—7 to 10 inches (18 to 25 cm); dark grayish brown (10YR 4/2) very fine sandy loam; weak thin platy structure; very friable, nonsticky and nonplastic; common fine roots; strongly acid (pH 5.4); clear wavy boundary.
- Cg—10 to 26 inches (25 to 66 cm); gray (2.5Y 5/1) stratified very fine sandy loam and silt loam; moderately thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; few roots; moderately acid (pH 5.6); clear wavy boundary.
- Cfg—26 to 60 inches (66 to 152 cm); gray (N 5/) permanently frozen stratified very fine sandy loam and silt loam; massive; very firm; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 2 to 7 inches (5 to 17 cm) Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizons:

- Color—hue of 5YR, 7.5YR, or 10YR; value from 2 to 5; chroma from 1 to 6
- Texture—slightly or moderately decomposed plant material
- Reaction-very strongly to moderately acid

Cg horizon (when present):

- Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2
- Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam
- Reaction—strongly acid to neutral

Cfg horizon:

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2 Texture—silt loam, very fine sandy loam or stratified very fine sandy loam, and silt loam Reaction—moderately acid to neutral

Brigadier Series

Taxonomic Classification

 Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts

Setting

Depth class: very shallow or shallow over weathered bedrock Drainage class: well drained Landform: hill crests and slopes Parent material: loess over weathered schist bedrock Slope: 15 to 70 percent Elevation: 1,001 to 2,799 feet (304 to 851 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 86X—Brigadier and Gilmore, cool silt loams, 15 to 45 percent slopes, Fort Wainwright survey area Location in survey area: UTM zone 6, 515720E

7161229N

Typical Pedon

- Brigadier silt loam—on a 44 percent slope at 1,700 feet (518 m) elevation, under a black spruce forest:
- Oe—0 to 6 inches (0 to 16 cm); black (7.5YR 2.5/1) moderately decomposed plant material; many very fine to coarse roots; extremely acid (pH 3.8); clear smooth boundary.
- A—6 to 8 inches (16 to 20 cm); black (7.5YR 2.5/1) silt loam; weak medium granular structure; friable, slightly sticky and slightly plastic; few very fine roots; very strongly acid (pH 4.6); abrupt wavy boundary.
- 2Bw—8 to 20 inches (20 to 50 cm); brown (10YR 4/3) extremely channery sandy loam; weak fine subangular blocky structure; very friable; slightly

sticky and slightly plastic; few fine roots; 40 percent channers, 10 percent flags, and 20 percent stones; strongly acid (pH 5.4); gradual smooth boundary.

2Cr—20 to 24 inches (50 to 60 cm); variegated weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 4 to 9 inches (11 to 24 cm) Depth to unconsolidated bedrock: 10 to 20 inches (25 to 50 cm) from the mineral soil surface

O horizon:

- Color—hue of 5YR or 7.5YR; value from 2 to 4; chroma from 1 to 3
- Texture: slightly or moderately decomposed plant material

Reaction-extremely acid or very strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3

Texture—silt loam or mucky silt loam

Reaction—extremely acid to strongly acid

2Bw horizon:

Color—value from 3 to 4; chroma from 3 to 4 Texture—silt loam, loam, or sandy loam Coarse fragment content—35 to 70 percent Reaction—strongly acid or moderately acid

2C horizon (when present):

- Color—variegated or hue from 10YR to 5Y; value from 4 to 6; chroma from 3 to 6
- Texture—loam, sandy loam, or loamy coarse sand in the fine earth fraction

Coarse fragment content—50 to 90 percent Reaction—strongly acid or moderately acid

Chatanika Series

Taxonomic Classification

 Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels

Setting

Depth class: moderately deep over permafrost

Drainage class: poorly drained Landform: terraces and lower hill slopes Parent material: colluviated silty loess Slope: 0 to 20 percent Elevation: 500 to 1,000 feet (152 to 305 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

- Map unit in which located: 103—Chatanika mucky silt loam, 0 to 3 percent slopes Location in survey area: UTM zone 6, 495400 m E,
- 7167350 m N

Typical Pedon

- Chatanika mucky silt loam—on a 1 percent slope at 550 feet (180 m) elevation, under a paper birch and black spruce forest with alder shrubs:
- Oi—0 to 4 inches (0 to 10 cm); very dark grayish brown (10YR 3/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and medium roots; very strongly acid (pH 5.0); clear wavy boundary.
- A—4 to 6 inches (10 to 15 cm); very dark grayish brown (10YR 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; common fine and few medium roots; very strongly acid (pH 5.0); clear irregular boundary.
- Cg/A—6 to 9 inches (15 to 23 cm); grayish brown (2.5Y 5/2) silt loam (Cg) and very dark grayish brown (10YR 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; common fine and few medium roots; strongly acid (pH 5.4); clear irregular boundary.
- Cg—9 to 21 inches (23 to 53 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; few dark brown (10YR 3/3) organic stained material; moderately acid (pH 6.0); clear smooth boundary.
- Cfg—21 to 60 inches (53 to 152 cm); grayish brown (2.5Y 5/2) permanently frozen silt loam; massive; extremely firm; few medium prominent brown (7.5YR 4/4) redoximorphic concentrations, and common medium faint gray (2.5Y 5/1) redoximorphic depletions; moderately acid (pH 6.0).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm) Depth to permafrost: 20 to 40 inches (50 to 102 cm)

O horizon:

Color—hue of 10YR or 7.5YR; value of 2, 2.5, or 3; chroma from 1 to 3

Texture—slightly or moderately decomposed plant material

Reaction-extremely to slightly acid

A horizon:

Color—hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3

Reaction—very strongly to slightly acid

Cg/A horizon:

Color—Cg material: hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4—A material: hue of 10YR or 2.5Y; value from 2 to 4; chroma from 1 to 3

Reaction-very strongly to slightly acid

Cg horizon:

Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 1 to 4 Texture—silt loam or very fine sandy loam

Reaction—moderately acid to neutral

Cfg horizon:

Color—hue of 10YR or 2.5Y; value of 5 or 6; chroma of 1 or 2

Texture—silt loam or very fine sandy loam Reaction—moderately acid to neutral

Chena Series

Taxonomic Classification

Sandy-skeletal, mixed Typic Cryorthents

Setting

Depth class: very deep Drainage class: excessively drained Landform: stream terraces Parent material: alluvium Slope range: 0 to 2 percent Elevation: 400 to 660 feet (122 to 197 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

- Map unit in which located: 138—Jarvis-Chena complex
- Location in survey area: SE¼, NW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

- Chena very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:
- Oi—0 to 4 inches (0 to 10 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter; many very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.
- C1—4 to 9 inches (10 to 23 cm); olive brown (2.5Y 4/3) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine to coarse roots; common medium prominent brown (7.5YR 5/4) redoximorphic concentrations; moderately acid (pH 6.0); gradual smooth boundary.
- 2C2—9 to 30 inches (23 to 75 cm); light grayish brown (2.5Y 5/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; neutral (pH 7.0); abrupt smooth boundary.
- 2C3—30 to 72 inches (75 to 183 cm); light olive brown (2.5Y 5/3) very gravelly sand; massive; loose, nonsticky and nonplastic; 40 percent gravel; slightly alkaline (7.4).

Range in Characteristics

Organic layer thickness: 0 to 6 inches (0 to 15 cm) Depth to sand and gravel: 4 to 10 inches (10 to 25 cm)

O horizon:

Color—hue of 5YR or 7.5YR; value of 2 or 3; chroma of 1 or 2 Texture—moderately or slightly decomposed plant material

Reaction—strongly acid to neutral

C horizon (when present):

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma from 2 to 4

Texture—very fine sandy loam often with strata of fine sandy loam, fine sand, and very fine sand Reaction—moderate or slightly acid

2C horizons:

- Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 2 to 4
- Texture—sand, fine sand, loamy sand, or coarse sand

Gravel content-40 to 85 percent

Reaction-slightly acid to slightly alkaline

Eielson Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: very deep Drainage class: somewhat poorly drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent Elevation: 397 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex

Location in survey area: NE¼, SW¼, Section 27, T1S, R1W, Fairbanks Meridian

Typical Pedon

- Eielson very fine sandy loam—on a 1 percent slope at 420 feet (128 m) elevation, under a white spruce and balsam poplar forest:
- Oi—0 to 2 inches (0 to 6 cm); very dark brown (10YR 2/2) slightly decomposed moss, leaves, twigs, and other woody debris; common very fine to coarse roots; slightly acid (pH 6.2); abrupt smooth boundary.
- O/C—2 to 11 inches (6 to 28 cm); stratified grayish brown (2.5Y 5/2) very fine sandy loam and very dark brown (10YR 2/2) moderately decomposed

plant material; massive; very friable, slightly sticky and slightly plastic; common very fine and medium roots; slightly acid (pH 6.2); clear smooth boundary.

- C1—11 to 49 inches (28 to 125 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and silt loam; weak thick platy structure; friable, slightly sticky and slightly plastic; few very fine and fine roots; many fine and prominent strong brown (7.5YR 5/8) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
- C2—49 to 60 inches (125 to 153 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and loamy fine sand; massive; very friable, nonsticky and nonplastic; few coarse prominent dark yellowish brown (10YR 4/4) redoximorphic concentrations; slightly alkaline (pH 7.6); diffuse smooth boundary.
- C3—60 to 72 inches (153 to 183 cm); dark grayish brown (2.5Y 4/2) stratified loamy fine sand and sand; single grain; loose, nonsticky and nonplastic; few coarse prominent yellowish red (5YR 4/6) redoximorphic concentrations and common fine and medium gray (5Y 5/1) redoximorphic depletions; slightly alkaline (pH 7.6).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm) *Note:* Thin buried organic horizons may occur throughout the profile.

O horizon:

Color—hue of 10YR or 7.5YR; value from 2 to 5; chroma from 1 to 4 Reaction—strongly acid to neutral

C horizon:

Color—hue of 10YR to 5Y; value from 3 to 6; chroma from 2 to 4

Texture—stratas of silt loam, very fine sandy loam, fine sandy loam, loamy fine sand, and sand Reaction—slightly acid to slightly alkaline

2C horizon (when present):

Color—hue from 10YR to 5Y; value from 3 to 6; chroma from 1 to 3

Texture—stratas of loamy fine sand, fine sand, loamy sand, and coarse sand

Coarse fragment content-35 to 60 percent

Reaction—slightly acid to slightly alkaline

Ester Series

Taxonomic Classification

 Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels

Setting

Depth class: Shallow to moderately deep over bedrock and permafrost
Drainage class: very poorly drained
Landform: dominantly north-facing hillslopes
Parent material: organic matter over colluvium over weathered bedrock
Slope: 12 to 70 percent
Elevation: 750 to 2,800 feet (229 to 853 m)
Precipitation: 10 to 14 inches (25 to 36 cm)
Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 114—Ester peat, 20 to 45 percent slopes

Location in survey area: SW¼, SW¼, Section 11, T1N, R1W, Fairbanks Meridian

Typical Pedon

Ester peat—at 1,200 feet (366 m) elevation under a sparse black spruce forest with low shrubs and moss:

- Oi—0 to 4 inches (0 to 10 cm); brown (7.5YR 4/4) peat consisting of raw sphagnum moss; very strongly acid (pH 4.6); clear smooth boundary.
- Oe—4 to 9 inches (10 to 22 cm); olive gray (5Y 5/2) sphagnum moss mucky peat; many twigs, leaves, and roots; extremely acid (pH 4.2); abrupt smooth boundary.
- ABjjf—9 to 12 inches (22 to 30 cm); permanently frozen very dark grayish brown (10YR 3/2) silt loam; weak thin platy structure; firm, slightly sticky and slightly plastic; many black (10YR 2/1) and common gray (2.5Y 5/1) irregular streaks; many thin ice lenses (less than 1 mm); common roots; moderately acid (pH 5.8); clear wavy boundary.
- 2Cjjf—12 to 21 inches (30 to 53 cm); permanently frozen dark gray (10YR 4/1) very channery silt loam; massive; firm, slightly sticky and slightly plastic; common black (10YR 2/1) and few gray (2.5Y 5/1) irregular streaks; 40 percent

weathered schist fragments; moderately acid (pH 5.8); gradual wavy boundary.

2Crf—21 to 72 inches (53 to 183 cm); permanently frozen weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm) Depth to permafrost: 10 to 30 inches (25 to 75 cm) Depth to bedrock: 20 to 39 inches (50 to 100 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 6; chroma from 1 to 8 Texture—peat or mucky peat Reaction—extremely acid or very strongly acid

A horizon (when present): Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma of 1 or 2 Texture—silt loam or mucky silt loam Reaction—extremely acid to strongly acid

ABjjf or Bjjfg horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 4 Coarse fragment content—0 to 35 percent Channer content—0 to 35 percent Flagstone content—0 to 5 percent Reaction—extremely acid to slightly acid

2Cjjf horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2 Coarse fragment content—40 to 60 percent Channer content—0 to 60 percent Flagstone content—0 to 15 percent Reaction—extremely acid to slightly acid

Fairbanks Series

Taxonomic Classification

 Coarse-silty, mixed, superactive Typic Eutrocryepts

Setting

Depth class: deep and very deep Drainage class: well drained Landform: hills Parent material: loess Slope: 0 to 50 percent Elevation: 500 to 2,000 feet (152 to 609 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 118—Fairbanks silt loam, 12 to 20 percent slopes

Location in survey area: W½, Section 28, T1N, R3E, Fairbanks Meridian

Typical Pedon

- Fairbanks silt loam—on a 14 percent slope at 985 feet (300 m) elevation, under a white spruce, paper birch, and quaking aspen forest:
- Oi—0 to 3 inches (0 to 8 cm); slightly decomposed forest litter.
- A—3 to 9 inches (8 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; many fine and very fine, and common medium and coarse roots; moderately acid (pH 5.8); clear wavy boundary.
- Bw—9 to 30 inches (23 to 76 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few fine and very fine roots; few fine prominent brown (7.5YR 4/4) redoximorphic concentrations; moderately acid (pH 5.8); clear smooth boundary.
- BC—30 to 60 inches (76 to 152 cm); grayish brown (2.5Y 5/2) silt loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine and medium roots; few fine prominent brown (7.5YR 5/4) redoximorphic concentrations; slightly acid (pH 6.4); gradual smooth boundary.
- C—60 to 72 inches (152 to 183 cm); light olive brown (2.5Y 5/3) silt loam; massive; very friable, nonsticky and nonplastic; common coarse prominent yellowish brown (10YR 5/6) redoximorphic concentrations; slightly acid (pH 6.5).

Range in Characteristics

Thickness of silty loess mantle: greater than 40 inches (> 102 cm) Organic layer thickness: 1 to 6 inches (3 to 15 cm) A horizon:

Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4 Reaction—moderately acid to neutral

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 4 Reaction—moderately acid to neutral

C horizon: Color—hue from 10YR to 5Y; value from 4 to 6; chroma from 2 to 4 Reaction—moderately acid to neutral

Fubar Series

Taxonomic Classification

Sandy-skeletal, mixed Typic Cryofluvents

Setting

Depth class: very shallow over sand and gravel Drainage class: moderately well drained Landform: flood plains and stream terraces Parent material: alluvium Slope: 0 to 2 percent Elevation: 397 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 124—Fubar-Piledriver complex, occasionally flooded Location in survey area: NW¼, SW¼, Section 15, T3S, R3E, Fairbanks Meridian

Typical Pedon

- Fubar silt loam—on a level plain at 460 feet (140 m) elevation, under a white spruce forest with alder understory:
- Oi—0 to 2 inches (0 to 5 cm); black (7.5YR 2.5/1) slightly decomposed forest litter; strongly acid (pH 5.2); abrupt smooth boundary.
- C1—2 to 10 inches (5 to 25 cm); olive brown (2.5Y 4/3) silt loam stratified with very fine sandy loam; moderate thin platy structure; very friable, nonsticky and nonplastic; few fine prominent

strong brown (7.5YR 5/6) redoximorphic concentrations; common medium and fine roots; slightly acid (pH 6.4); clear smooth boundary.

- 2C2—10 to 24 inches (25 to 60 cm); dark grayish brown (2.5Y 4/2) loamy fine sand stratified with fine sand; massive; very friable, nonsticky and nonplastic; slightly acid (pH 6.4); abrupt smooth boundary.
- 2C3—24 to 72 inches (60 to 183 cm); dark grayish brown (2.5Y 4/2) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; 40 percent rounded gravel; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (2 to 10 cm) *Depth to sand and gravel:* 1 to 10 inches (3 to 25 cm)

O horizon:

- Color—hue from 5YR to 10YR; value of 2 or 3; chroma of 1 or 2
- Texture—moderately or slightly decomposed plant material

Reaction-strongly acid to slightly acid

C horizon:

Color—hue of 2.5Y or 5Y; value 3 or 4; chroma of 2 or 3

Texture—silt loam with stratas of very fine sandy loam, loamy fine sand, and fine sand

Reaction—slightly acid to neutral

2C horizon:

Color-variegated

Texture—sand, fine sand, coarse sand or very to extremely gravelly sand or coarse sand Gravel content—35 to 85 percent Reaction—slightly acid or neutral

Gilmore Series

Taxonomic Classification

Loamy-skeletal, mixed, superactive, shallow
 Typic Dystrocryepts

Setting

Depth class: very shallow and shallow over weathered bedrock Drainage class: well drained Landform: hill crests and slopes Parent material: loess over weathered bedrock Slope: 0 to 70 percent Elevation: 500 to 2,800 feet (152 to 853 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 to -2 degrees C)

Typical Pedon Location

Map unit in which located: 127—Gilmore silt loam, 12 to 20 percent slopes Location in survey area: SW¼, NW¼, Section 24, T1N, R3E, Fairbanks Meridian

Typical Pedon

- Gilmore silt loam—on a 15 percent slope at 1,082 feet (330 m) elevation, under a white spruce, paper birch, and quaking aspen forest:
- Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) partially decomposed forest litter and moss; many roots; mycelia; moderately acid (pH 5.8); abrupt smooth boundary.
- A—3 to 6 inches (7 to 15 cm); dark brown (10YR 3/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; moderately acid (pH 5.8); abrupt wavy boundary.
- Bw—6 to 13 inches (15 to 33 cm); dark brown (10YR 4/3) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; few roots; moderately acid (pH 5.8); clear smooth boundary.
- 2BC—13 to 16 inches (33 to 41 cm); olive brown (2.5Y 4/3) channery silt loam; massive; very friable, nonsticky and nonplastic; 20 percent schist channers, 2 percent schist flags; slightly acid (pH 6.3); gradual wavy boundary.
- 2Cr—16 to 72 inches (41 to 183 cm); weathered fractured schist bedrock.

Range in Characteristics

Organic layer thickness: 2 to 4 inches (5 to 11 cm) *Depth to bedrock:* 8 to 24 inches (20 to 60 cm)

O horizon:

- Color—hue of 7.5YR or 10YR; value from 2 to 3; chroma from 1 to 3
- Texture—slightly or moderately decomposed plant material

Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 4 Reaction—strongly acid to slightly acid

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6 Reaction—strongly acid to slightly acid

2BC horizon (when present):

Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma from 3 to 6 Texture—silt loam or sandy loam Coarse fragment content—20 to 75 percent Channer content—20 to 75 percent Flagstone content—0 to 15 percent Reaction—strongly acid to slightly acid

Goldstream Series

Taxonomic Classification

Coarse-silty, mixed, superactive, subgelic Typic
 Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost Drainage class: very poorly drained Landform: toeslopes and valley floors Parent material: organic matter over loess Slope: 0 to 7 percent Elevation: 500 to 1,200 feet (152 to 366 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 134—Goldstream peat, 3 to 7 percent slopes Location in survey area: NE¼, NW¼, Section 11,

T1N, R3E, Fairbanks Meridian

Typical Pedon

Goldstream peat—on a 4 percent slope at 625 feet

(191 m) elevation, under stunted black spruce with low shrubs, sedge tussocks, and moss:

Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) peat; extremely acid (pH 4.4); clear smooth boundary.

Oe—3 to 9 inches (8 to 23 cm); black (10YR 2/1) mucky peat; extremely acid (pH 4.4); clear smooth boundary.

A—9 to 12 inches (23 to 30 cm); very dark grayish brown (2.5Y 3/2) mucky silt loam; massive; friable, nonsticky and nonplastic; many roots; very strongly acid (pH 4.7); gradual irregular boundary.

- Bjjg/A—12 to 20 inches (30 to 50 cm); gray (5Y 5/1) silt loam (Bjjg) and very dark grayish brown (2.5Y 3/2) mucky silt loam (A); massive; friable, nonsticky and nonplastic; very strongly acid (pH 4.9); clear irregular boundary.
- Cf—20 to 60 inches (50 to 152 cm); gray (5Y 5/1) permanently frozen silt loam.

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm) Depth to permafrost: 14 to 24 inches (35 to 60 cm)

O horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3 Texture—peat or mucky peat Reaction—extremely or very strongly acid

A horizon:

Color—hue from 10YR to 5Y; value from 2 to 4; chroma from 1 to 3 Texture—silt loam or mucky silt loam Reaction—very strongly or strongly acid

Bjjg/A horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 4 to 6; chroma from 0 to 2 Texture—silt loam or mucky silt loam Reaction—very strongly or strongly acid

Cf horizon:

Color—hue of 10YR, 2.5Y, 5Y, or N; value from 3 to 6; chroma from 0 to 3 Texture—silt loam Reaction—very strongly or strongly acid

Histels

Taxonomic Classification

Histels

Setting

Depth class: shallow to moderately deep over permafrost Drainage class: very poorly drained Landform: flood plains and terraces Parent material: organic matter over alluvium and/or loess Slope: 0 to 7 percent Elevation: 400 to 1,200 feet (122 to 366 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels Location in survey area: NE¼, SE¼, Section 13, T1N, R2W, Fairbanks Meridian

Representative Pedon

- Histels—on a level slope at 426 feet (130 m) elevation, under sparse black spruce, birch scrub, and sedge tussock:
- Oi—0 to 12 inches (0 to 30 cm); black (10YR 2/1) peat; common medium and few fine roots; very strongly acid (pH 4.8); clear smooth boundary.
- Oe—12 to 16 inches (30 to 42 cm); very dark brown (10YR 2/2) mucky peat; moderately acid (pH 5.6); abrupt smooth boundary.
- Oef—16 to 26 inches (42 to 65 cm); very dark brown (10YR 2/2) permanently frozen mucky peat; moderately acid (pH 5.6); clear smooth boundary.
- Cfg—26 to 36 inches (65 to 91 cm); very dark gray (2.5Y 3/1) permanently frozen silt loam; strongly acid (pH 5.5).

Range in Characteristics

Depth to permafrost: 16 to 24 inches (40 to 60 cm) Organic layer thickness: greater than 16 inches (> 40 cm)

O horizon:

Color-hue from 5YR to 10YR; value from 2 to 5;

chroma from 1 to 6 Texture—peat, mucky peat, or muck Reaction—extremely acid to moderately acid

Cg horizon (when present): Color—hue of 10YR or 2.5Y; value from 3 to 5; chroma of 1 or 2 Texture—silt loam, mucky silt loam, silty clay loam or loamy fine sand Reaction—moderately acid or slightly acid

Histic Cryaquepts

Taxonomic Classification

Histic Cryaquepts

Setting

Depth class: very deep Drainage class: poorly drained Landform: depressions on terraces Parent material: organic material over loess or loess reworked by water Slope: 0 to 3 percent Elevation: 500 to 1,200 feet (152 to 366 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 182—Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils Location in survey area: UTM zone 6, 498818 m N, 7173649 m E

Representative Pedon

- Histic Cryaquepts—on a level slope at 585 feet (178 m) elevation, under sedges:
- Oa—0 to 13 inches (0 to 32 cm); very dark brown (7.5YR 2.5/2) muck; many very fine and fine roots; very strongly acid (pH 5.0); abrupt smooth boundary.
- C—13 to 30 inches (32 to 75 cm); olive brown (2.5Y 4/3) silt loam; massive; friable, slightly sticky and slightly plastic; common medium distinct grayish brown (2.5Y 5/2) mottles; strongly acid (pH 5.4); gradual smooth boundary.

Cg—30 to 72 inches (75 to 183 cm); dark grayish brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; many medium prominent strong brown (7.5YR 4/6) mottles; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

O Horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Texture—mucky peat or muck

Reaction—very strongly acid to moderately acid

C horizon:

Color—value of 3 or 4; chroma from 2 to 4 Texture—silt loam or very fine sandy loam Reaction—strongly acid to moderately acid

Cg horizon:

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma of 1 or 2

Texture—silt loam with strata of very fine sand Reaction—strongly acid to slightly acid

Jarvis Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents

Setting

Depth class: moderately deep to sand and gravel Drainage class: well drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (122 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 138—Jarvis-Chena complex

Location in survey area: UTM zone 6, 495247 m E, 7168290 m N

Typical Pedon

- Jarvis very fine sandy loam—on a level slope at 545 feet (166 m) elevation, under a paper birch and white spruce forest:
- Oe/C—0 to 3 inches (0 to 8 cm); black (10YR 2/1) moderately decomposed plant material and dark grayish brown (2.5Y 4/2) very fine sandy loam; common very fine to coarse roots; moderately acid (pH 5.6); clear wavy boundary.
- C1—3 to 6 inches (8 to 15 cm); olive brown (2.5Y 4/3) and olive gray (5Y 5/2) very fine sandy loam; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; common medium distinct dark yellowish brown (10YR 4/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.
- C2—6 to 16 inches (15 to 41 cm); grayish brown (2.5Y 5/2) and dark yellowish brown (10YR 4/6) stratified fine sand and very fine sand; massive; very friable, nonsticky and nonplastic; few very fine and medium roots; few medium prominent gray (5Y 6/1) redoximorphic depletions; neutral (pH 7.2); gradual smooth boundary.
- C3—16 to 24 inches (41 to 61 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and nonplastic; few very fine and fine roots; slightly alkaline (pH 7.4); abrupt smooth boundary.
- 2C4—24 to 72 inches (61 to 183 cm); gray (5Y 5/1) sand; massive; loose, nonsticky and nonplastic; 10 percent gravel; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 1 to 4 inches (3 to 10 cm) Depth to sand and gravel: 13 to 40 inches (33 to 102 cm)

Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

Oe/C horizon (C material may not be present): Color—O material: hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2—C material: hue of 2.5Y or 5Y; value from 3 to 5; chroma of 1 or 2 Texture—moderately decomposed and slightly decomposed forest litter, mixed in some pedons

with very fine sandy loam or silt loam

Reaction-very strongly acid to neutral

C horizon:

Color—hue from 10YR to 5Y; value of 4 or 5; chroma of 1 to 6 Texture—stratas of very fine sandy loam, silt loam, loamy fine sand, fine sand, or sand Gravel content—0 to 15 percent Reaction—slightly acid to slightly alkaline

2C horizon:

Color—hue from 10YR to 5Y; value from 2 to 6; chroma from 1 to 4 Texture—sand or loamy sand Coarse fragment content—35 to 70 percent Gravel content—25 to 60 percent Cobble content—10 to 30 percent Reaction—slightly acid to slightly alkaline

Lemeta Series

Taxonomic Classification

• Euic, subgelic Typic Fibristels

Setting

Depth class: Shallow to moderately deep over permafrost Drainage class: very poorly drained Landform: fens on terraces Parent materials: organic matter Slope: 0 to 1 percent Elevation: 400 to 900 feet (129 to 290 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 140—Lemeta peat Location in survey area: SE¼, SW¼, Section 32, T1N, R1W, Fairbanks Meridian

Typical Pedon

Lemeta peat—on a level slope at 420 feet (128 m) elevation under sparse black spruce, scrub birch, sphagnum moss, and sedge vegetation:

Oi1-0 to 5 inches (0 to 12 cm); brown (7.5YR 5/3)

slightly decomposed moss peat; few very fine to coarse roots; extremely acid (pH 3.8); gradual smooth boundary.

Oi2—5 to 11 inches (12 to 28 cm); brown (7.5YR 5/3) slightly decomposed moss and lichen peat; few very fine to coarse roots; extremely acid (pH 4.0); clear wavy boundary.

Oi3—11 to 18 inches (28 to 45 cm); strong brown (7.5YR 5/6) slightly decomposed moss peat; extremely acid (pH 4.0); clear wavy boundary.

Oe—18 to 20 inches (45 to 50 cm); black (7.5YR 2.5/1) moderately decomposed mucky sedge peat; extremely acid (pH 4.0); clear smooth boundary.

- Oef1—20 to 24 inches (50 to 60 cm); black (7.5YR 2.5/1) permanently frozen moderately decomposed mucky sedge peat; extremely acid (pH 4.0); gradual wavy boundary.
- Oef2—24 to 60 inches (60 to 152 cm); black (10YR 2/1) permanently frozen moderately decomposed mucky sedge peat; 20 percent dark brown (7.5YR 3/3) coarse wood fragments; strongly acid (pH 5.4).

Range In Characteristics

Depth to permafrost: 14 to 24 inches (35 to 60 cm) Organic layer thickness: greater than 40 inches (> 102 cm)

Oi horizons:

Color—hue of 7.5YR or 10YR; value from 2 to 5; chroma from 3 to 6 Reaction—extremely acid to moderately acid

Oe and Oef horizons: Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3 Reaction—extremely acid to moderately acid

Oa horizons (when present): Color—hue of 7.5Y or 10YR; value from 1 to 3; chroma from 1 to 3 Reaction—extremely acid to moderately acid

Liscum Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts

Setting

Depth class: deep or very deep over sand and gravel

Drainage class: very poorly drained

Landform: alluvial flats

Parent material: organic material over loess or alluvium

Slope: 0 to 2 percent

Elevation: 400 to 650 feet (121 to 198 m) *Precipitation:* 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 141—Liscum-Noonku complex

Location in survey area: NE¼, SE¼, Section 5, T2S, R2E, Fairbanks Meridian

Typical Pedon

Liscum peat—on a level slope at 420 feet (128 m) elevation under sweet gail, leather leaf, and sedge vegetation:

- Oi—0 to 4 inches (0 to 8 cm); dark brown (7.5YR 3/3) sedge peat; common very fine to medium roots; strongly acid (pH 5.4); clear wavy boundary.
- Oa—4 to 11 inches (8 to 28 cm); black (7.5YR 2.5/1) muck; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
- A—11 to 15 inches (28 to 38 cm); black (10YR 2/1) mucky silt loam; many very fine and fine roots; moderately acid (pH 5.6); clear irregular boundary.
- Bg—15 to 70 inches (38 to 178 cm); gray (5Y 5/1) stratified very fine sandy loam and silt loam; massive; friable; slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations and common medium prominent bluish gray (5PB 5/1) redoximorphic depletions; neutral (pH 6.6); gradual irregular boundary.
- C—70 to 72 inches (178 to 183 cm); dark gray (N
 4/) fine sandy loam; massive; friable; nonsticky and nonplastic; neutral (pH 7.2).

Range In Characteristics

Organic layer thickness: 8 to 16 inches (20 to 40 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 4; chroma from 1 to 3 Texture—peat, mucky peat, or muck Reaction—strongly acid to slightly acid

A horizon:

Color—hue of 10YR or 2.5Y; value of 2 or 3; chroma of 1 or 2 Texture—silt loam or sandy loam Reaction—moderately acid to neutral

Bg horizon:

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 2 Texture—silt loam with strata of very fine sandy loam, loamy fine sand, and fine sand Coarse fragment content—0 to 10 percent

Reaction—slightly acid or neutral

C horizon (when present):

Color—hue of 2.5Y, 5Y, 5GY, or N; value of 4 or 5; chroma from 0 to 3 Texture—fine sandy loam or sandy loam Coarse fragment content—0 to 15 percent Reaction—slightly acid or neutral

2C horizon (when present): Color—variegated Texture—sand or coarse sand Coarse fragment content—15 to 50 percent Gravel content—15 to 50 percent Cobble content—0 to 10 percent Reaction—slightly acid or neutral

Minto Series

Taxonomic Classification

 Coarse-silty, mixed, superactive Aquic Eutrocryepts

Setting

Depth class: very deep

Drainage class: moderately well drained Landform: footslopes of hills Parent material: loess or colluviated loess Slope: 0 to 20 percent Elevation: 500 to 2,000 feet (152 to 609 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 143—Minto silt loam, 3 to 7 percent slopes

Location in survey area: UTM zone 6, 496550 m E, 7196300 m N

Typical Pedon

Minto silt loam—on a 7 percent slope at 820 feet (250 m) elevation, under a paper birch and white spruce forest:

- Oi—0 to 5 inches (0 to 13 cm); dark brown (7.5YR 3/2) slightly decomposed leaves, twigs, and moss; few fine and medium roots; very strongly acid (pH 5.0); abrupt smooth boundary.
- A—5 to 9 inches (13 to 23 cm); very dark grayish brown (10YR 3/2) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine and medium roots; moderately acid (pH 6.0); clear smooth boundary.
- Bw—9 to 16 inches (23 to 41 cm); light olive brown (2.5Y 5/3) silt loam; moderate medium platy structure; friable, nonsticky and nonplastic; few fine roots; common medium faint grayish brown (2.5Y 5/2) redoximorphic depletions; moderately acid (pH 6.0); diffuse wavy boundary.
- C—16 to 72 inches (41 to 183 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, nonsticky and nonplastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; slightly acid (pH 6.3).

Range in Characteristics

Organic layer thickness: 2 to 6 inches (5 to 15 cm)

O horizon:

- Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2
- Texture—slightly or moderately decomposed plant material
- Reaction-very strongly acid or strongly acid

A horizon:

Color—value of 2 or 3; chroma of 1 or 2 Texture—silt loam or very fine sandy loam Reaction—moderately acid or slightly acid

B horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 2 to 5 Texture—silt loam or very fine sandy loam Reaction—slightly acid to slightly alkaline

C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 6; chroma of 2 or 3

Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Mosquito Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost

Drainage class: very poorly drained Landform: depressions on alluvial flats Parent material: organic matter over alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

- Map unit in which located: 149—Mosquito mucky peat
- Location in survey area: SW¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

- Mosquito mucky peat—on a level plain at 432 feet (132 m) elevation, under dwarf birch and sedge vegetation:
- Oi—0 to 15 inches (0 to 38 cm); very dark brown (10YR 2/2) peat; common very fine and few fine

and medium roots; moderately acid (pH 6.0); clear wavy boundary.

- OA—15 to 18 inches (38 to 46 cm); dark brown (7.5YR 3/2) mucky silt loam; common very fine and few fine roots; moderately acid (pH 6.0); clear wavy boundary.
- Cg—18 to 24 inches (46 to 60 cm); dark greenish gray (5BG 4/1) very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; slightly acid (pH 6.4); clear wavy boundary.
- Cfg—24 to 60 inches (60 to 152 cm); dark greenish gray (5BG 4/1) permanently frozen very fine sandy loam stratified with silt loam; massive; friable, nonsticky and nonplastic; few fine roots; slightly acid (pH 6.4).

Range in Characteristics

Organic layer thickness: 9 to 16 inches (23 to 41 cm)

Depth to permafrost: 14 to 31 inches (36 to 80 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 3 Texture—peat, mucky peat, or muck

Reaction—strongly to slightly acid

Bg or Cg horizon:

Color—hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2

Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand

Reaction—slightly acid or neutral

Bfg or Cfg horizon:

Color—hue of 10YR, 2.5Y, 5Y, 5BG, or N; value of 4 or 5; chroma from 0 to 2

Texture—stratas of silt loam, silty clay loam, very fine sandy loam and loamy fine sand

Reaction—slightly acid or neutral

Noonku Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep Drainage class: very poorly drained Landform: sloughs and depressions on flood plains Parent material: alluvium Slope: 0 to 1 percent Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex

Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

Noonku silt loam—in a level slough at 465 feet (142 m) elevation, under grass and sedge vegetation with some willow and birch shrubs:

Oe—0 to 2 inches (0 to 4 cm); very dark brown (7.5YR 2.5/2) moderately decomposed sedge, moss and grass blades; many very fine to medium and common coarse roots; neutral (pH 7.0); abrupt smooth boundary.

- A—2 to 6 inches (4 to 16 cm); dark brown (7.5YR 3/2) silt loam; massive; friable, nonsticky and nonplastic; common very fine and fine roots; slightly acid (pH 6.2); gradual smooth boundary.
- Cg1—6 to 20 inches (16 to 50 cm); dark gray (2.5Y 4/1) very fine sandy loam stratified with silt loam; massive; friable; nonsticky and nonplastic; few very fine and fine roots; few coarse prominent dark brown (7.5YR 3/3) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.

Cg2—20 to 28 inches (50 to 72 cm); greenish gray (5G 5/1) very fine sandy loam stratified with loamy fine sand; very friable; nonsticky and nonplastic; few fine prominent strong brown (7.5YR 5/8) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.

Cg3—28 to 47 inches (72 to 120 cm); dark gray (N 4/) loamy fine sand stratified with very fine sandy loam; very friable; nonsticky and nonplastic; common medium prominent reddish yellow (7.5YR 7/8) redoximorphic concentrations; neutral (pH 6.8); diffuse smooth boundary.

2Cg4—47 to 72 inches (120 to 183 cm); gray (N 5/) very gravelly loamy sand; massive; loose, nonsticky and nonplastic; few medium prominent grayish green (5G 5/2) redoximorphic depletions; neutral (pH 6.8).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm) Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm)

Note: Buried organic layers may occur at any depth.

O horizon:

Color—hue of 10YR or 7.5YR; value of 2 or 3; chroma from 1 to 3

Texture—slightly or moderately decomposed plant material

Reaction—slightly acid or neutral

A horizon:

Color—hue from 7.5YR to 2.5Y; value from 2 to 4; chroma from 1 to 2

Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Cg horizon:

- Color—hue of 2.5Y, 5Y, 10Y, 5GY, 5G, or N; value from 3 to 5; chroma from 0 to 2
- Texture—silt loam or very fine sandy loam; thin layers of coarser material are occasionally present

Reaction—slightly acid to slightly alkaline

2Cg horizon (when present):

- Color—hue of 2.5Y, 5Y, 5GY, 5G, or N; value from 2 to 5; chroma from 0 to 3
- Texture—loamy sand, loamy fine sand, fine sand, or sand

Coarse fragment content—0 to 70 percent Reaction—slightly acid to neutral

North Pole Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aeric Cryaquepts

Setting

Depth class: moderately deep over sand and gravel Drainage class: poorly drained Landform: alluvial flats Parent material: alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 154—North Pole-Noonku complex

Location in survey area: NE¼, SW¼, Section 28, T1S, R1E, Fairbanks Meridian

Typical Pedon

North Pole very fine sandy loam—on a level plain at 540 feet (165 m) elevation, under a tamarack and black spruce forest with Labrador tea understory and moss ground cover:

- Oi—0 to 2 inches (0 to 6 cm); very dark brown (7.5YR 2.5/2) slightly decomposed moss; common very fine to coarse roots; neutral (pH 7.0); abrupt smooth boundary.
- Oe—2 to 4 inches (6 to 11 cm); black (2.5Y 2.5/1) moderately decomposed moss; common fine and very fine roots; neutral (pH 7.3); abrupt irregular boundary.
- Bg/A—4 to 18 inches (11 to 45 cm); 60 percent light olive brown (2.5Y 5/3) and 40 percent very dark gray (10YR 3/1) very fine sandy loam stratified with very fine sand; weak thick platy structure; friable, nonsticky and nonplastic; common medium distinct gray (2.5Y 6/1) redoximorphic concentrations; few fine and very fine roots; neutral (pH 7.2); gradual smooth boundary.
- Bw—18 to 39 inches (45 to 98 cm) light olive brown (2.5Y 5/4) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.2); gradual smooth boundary.
- 2C—39 to 49 inches (98 to 125 cm); olive brown (2.5Y 4/3) loamy fine sand; massive; very friable, nonsticky and nonplastic; neutral (pH 7.2); gradual smooth boundary.

2Cg—49 to 72 inches (125 to 183 cm); gray (2.5Y 5/1) sand; single grain; loose; nonsticky and nonplastic; neutral (pH 7.2).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm) Depth to sand and gravel: 10 to 40 inches (25 to 102 cm)

O horizon:

- Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 or 2
- Texture—slightly or moderately decomposed plant material
- Reaction-very strongly acid to neutral

B horizon:

- Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 4
- Texture—strata of very fine sandy loam, silt loam, loamy very fine sand, and loamy fine sand
- Reaction—slightly acid or neutral

2C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3 Texture—sand or loamy sand Coarse fragment content—0 to 70 percent Gravel content—0 to 70 percent Cobble content— 0 to 15 percent Reaction—neutral or slightly alkaline

Peede Series

Taxonomic Classification

 Coarse-silty, mixed, superactive, nonacid Typic Cryaquents

Setting

Depth class: very deep Drainage class: very poorly drained Landform: depressions on flood plains Parent material: alluvium Slope: 0 to 1 percent Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 155—Peede silt loam Location in survey area: SW¼, SE¼, Section 23, T1S, R2W, Fairbanks Meridian

Typical Pedon

- Peede silt loam—on a level depression at 420 feet (128 m) elevation, under grass and sedge vegetation with some willow shrubs:
- Oe—0 to 2 inches (0 to 5 cm); very dark brown (7.5YR 2.5/2) moderately decomposed plant material; few fine and very fine roots; slightly acid (pH 6.1); abrupt smooth boundary.
- A—2 to 5 inches (5 to 13 cm); very dark grayish brown (2.5Y 3/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; common very fine and fine roots; neutral (pH 6.6); clear smooth boundary.
- Cg1—5 to 10 inches (13 to 25 cm); grayish brown (2.5Y 5/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; neutral (pH 6.6); diffuse smooth boundary.
- Cg2—10 to 72 inches (25 to 183 cm); dark gray (N 4/) silt loam; massive; friable, slightly sticky and slightly plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 1 to 5 inches (3 to 13 cm) Depth to sand and gravel: 40 to greater than 60 inches (101 to > 152 cm) Note: Buried organic layers may occur at any depth.

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3 Texture—moderately or well decomposed plant material

Reaction—slightly acid or neutral

Cg horizon:

- Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 3 to 5; chroma from 0 to 2
- Texture—silt loam or very fine sandy loam Reaction—slightly acid to slightly alkaline

2C horizon (when present): Color—hue of 2.5Y or 5Y; value from 2 to 5; chroma from 1 to 3 Texture—loamy sand, loamy fine sand, fine sand, or

l exture—loamy sand, loamy fine sand, fine sand, oi sand

Coarse fragment content—0 to 70 percent Reaction—slightly acid or neutral

Piledriver Series

Taxonomic Classification

 Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents

Setting

Depth class: moderately deep over sand and gravel Drainage class: somewhat poorly drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (121 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 112—Eielson-Piledriver complex

Location in survey area: SW¼, SW¼, Section 23, T3S, R3E, Fairbanks Meridian

Typical Pedon

- Piledriver very fine sandy loam—on a level plain at 545 feet (166 m) elevation, under a paper birch and white spruce forest:
- Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/3) and very dark brown (7.5YR 2.5/2) slightly decomposed moss, leaves, twigs, and other woody debris; common fine and few medium roots; extremely acid (pH 4.1); clear wavy boundary.
- C1—3 to 10 inches (8 to 25 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure parting to weak medium granular;

friable, nonsticky and nonplastic; few fine roots; many medium, distinct gray redoximorphic depletions; slightly acid (pH 6.5); abrupt smooth boundary.

- C2—10 to 15 inches (25 to 38 cm); light olive brown (2.5Y 5/3) silt loam; weak medium platy structure parting to weak medium granular; very friable, nonsticky and nonplastic; few fine roots; common medium distinct dark gray (5Y 4/1) redoximorphic depletions; common black (7.5YR 2.5/1) strata of organic material up to 1 inch (up to 3 cm) thick; neutral (pH 7.2); clear smooth boundary.
- C3—15 to 33 inches (38 to 84 cm); grayish brown (2.5Y 5/2) loamy fine sand; weak thin platy structure; very friable, nonsticky and nonplastic; common medium faint gray (2.5Y 5/1) redoximorphic depletions; neutral (pH 7.3); clear smooth boundary.
- 2C4—33 to 72 inches (84 to 183 cm); grayish brown (2.5Y 5/2) extremely gravelly sand; single grain; loose, nonsticky and nonplastic; 70 percent rounded gravel; neutral (pH 7.3).

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm) *Depth to sand and gravel:* 20 to 40 inches (50 to 102 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3

Reaction-extremely acid to slightly acid

C horizon:

Color—hue from 10YR to 5Y; value from 3 to 5; chroma of 2 or 3

Texture—very fine sandy loam or silt loam with stratas of loamy very fine sand, and loamy fine sand

Reaction—slightly acid or neutral

2C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma of 2 or 3 Coarse fragment content—15 to 70 percent Gravel content—15 to 70 percent

Cobble content—0 to 10 percent

Reaction—slightly acid or neutral

Salchaket Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents

Setting

Depth class: very deep Drainage class: well drained Landform: flood plains Parent material: alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (122 to 198 meters) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 162—Salchaket very fine sandy loam
Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

Salchaket very fine sandy loam—on a level natural levee at 420 feet (128 m) elevation, under a paper birch and white spruce forest:

- Oi—0 to 3 inches (0 to 7 cm); very dark brown (10YR 2/2) mat of slightly decomposed forest litter and moss; many very fine to coarse roots; strongly acid (pH 5.2); abrupt smooth boundary.
- A—3 to 6 inches (7 to 14 cm); brown (10YR 4/3) very fine sandy loam stratified with silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common very fine to coarse roots; few medium distinct dark grayish brown (2.5Y 4/2) redoximorphic depletions; strongly acid (pH 5.4); gradual smooth boundary.
- C1—6 to 24 inches (14 to 62 cm); light olive brown (2.5Y 5/3) very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; few fine roots; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6); gradual smooth boundary.
- C2—24 to 45 inches (62 to 114 cm); grayish brown (2.5Y 5/2) stratified very fine sandy loam and fine sand; massive; very friable, nonsticky and

nonplastic; few fine prominent strong brown (7.5YR 5/6) redoximorphic concentrations; neutral (pH 7.0); gradual smooth boundary. 2C3—45 to 72 (114 to 183 cm); variegated very gravely sand; loose; single grain; nonsticky and nonplastic; neutral (pH 6.7).

Range in Characteristics

Thickness of organic mat: 1 to 7 inches (3 to 18 cm) Depth to sand and gravel 40 to greater than 60 inches (101 to > 152 cm)

Note: Organic carbon decreases irregularly with depth; thin buried organic horizons may occur throughout the profile.

O horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 2 to 4

Texture—slightly decomposed to moderately decomposed plant material

Reaction—strongly to slightly acid

C horizon:

Color—hue of 2.5Y or 5Y; value of 4 or 5; chroma of 2 or 3

Texture—stratas of silt loam, loamy very fine sand, loamy fine sand, and fine sand

Reaction—slightly acid to slightly alkaline

2C horizon (when present):

Color—variegated Gravel content—0 to 65 percent

Reaction-slightly acid to slightly alkaline

Saulich Series

Taxonomic Classification

 Coarse silty, mixed, superactive, subgelic Typic Histoturbels

Setting

Depth class: shallow or moderately deep over permafrost Drainage class: very poorly drained Landform: valley sides and hillslopes Parent material: colluviated loess Slope: 0 to 30 percent Elevation: 500 to 1,300 feet (152 to 376 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 164—Saulich peat, 3 to 7 percent slopes

Location in survey area: UTM zone 6, 472550 m E, 7192900 m N

Typical Pedon

- Saulich peat—on a 4 percent slope at 510 feet (155 m) elevation, under a sparse forest of black spruce with an understory of low shrubs:
- Oi—0 to 9 inches (0 to 23 cm); very dark brown (7.5YR 2.5/3) peat mat of undecomposed sphagnum moss and roots; strongly acid (pH 5.2); clear smooth boundary.
- Oe—9 to 16 inches (23 to 41 cm); black (7.5YR 2.5/1) and dark brown (7.5YR 3/2) mucky peat; mat of moderately decomposed moss; many roots; slightly acid (pH 6.4); abrupt smooth boundary.
- Bg/A—16 to 21 inches (41 to 53 cm); very dark grayish brown (2.5Y 3/2) and black (7.5YR 2.5/1) silt loam; massive; friable, nonsticky and nonplastic; few roots; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6); gradual boundary.
- Cfg—21 to 72 inches (53 to 183 cm); dark grayish brown (2.5Y 4/2) permanently frozen silt loam; massive; many clear ice lenses; few medium prominent light brownish gray (10YR 6/2) redoximorphic depletions; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

Depth to permafrost: 16 to 24 inches (41 to 60 cm)

O horizon:

Color—hue of 7.5YR or 10YR; value from 2 to 4; chroma from 1 to 3

Texture—peat or mucky peat

Reaction—extremely acid to slightly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3 Texture—silt loam or mucky silt loam Reaction-moderately acid to neutral

B horizon:

Color—hue from 10YR to 5Y; value from 3 to 5; chroma from 1 to 3 Texture—silt loam or very fine sandy loam Reaction—moderately acid to neutral

C horizon:

Color—hue of 2.5Y or 5Y; value from 3 to 5; chroma from 1 to 3 Texture—silt loam or very fine sandy loam Reaction—slightly acid or neutral

Steese Series

Taxonomic Classification

 Coarse-loamy, mixed, superactive Typic Eutrocryepts

Setting

Depth class: moderately deep over weathered bedrock Drainage class: well drained Landform: slopes and crests of hills Parent material: loess over weathered schist bedrock Slope range: 3 to 70 percent Elevation: 750 to 2,800 feet (229 to 853 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 170—Steese silt loam, 7 to 12 percent slopes Location in survey area: NW¼, NW¼, Section 14,

T1N, R3E, Fairbanks Meridian

Typical Pedon

Steese silt loam—on an 8 percent slope at 885 feet (270 m) elevation, under a paper birch, white spruce, and quaking aspen forest with alder shrubs:

Oi—0 to 2 inches (0 to 5 cm); dark brown (7.5YR 3/2) slightly decomposed forest litter and moss;

many roots; mycelia at base of horizon; charcoal fragments; slightly acid (pH 6.1); abrupt smooth boundary.

- A—2 to 5 inches (5 to 13 cm); brown (10YR 4/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many roots; common mica flakes; strongly acid (pH 5.3); abrupt wavy boundary.
- Bw—5 to 20 inches (13 to 51 cm); light olive brown (2.5Y 5/4) silt loam; moderate medium platy structure; very friable, nonsticky and nonplastic; common medium and fine roots; few medium distinct yellowish brown (10YR 5/6) redoximorphic concentrations; few charcoal fragments; many mica flakes; moderately acid (pH 5.8); abrupt wavy boundary.
- BC—20 to 27 inches (51 to 69 cm); brown (10YR 5/3) silt loam; weak thin platy structure; very friable, nonsticky and nonplastic; common medium prominent yellowish brown (10YR 5/6) redoximorphic concentrations; moderately acid (pH 5.8); clear wavy boundary.
- 2C—27 to 33 inches (69 to 84 cm); light olive brown (2.5Y 5/3) channery silt loam; massive; very friable; 20 percent schist channers; slightly acid (pH 6.3); clear wavy boundary.
- 2Cr—33 to 72 inches (84 to 183 cm); highly weathered schist bedrock.

Range in Characteristics

Organic layer thickness: 1 to 6 inches (3 to 15 cm) Depth to unconsolidated bedrock: 20 to 40 inches (51 to 102 cm)

A horizon:

Color—hue of 7.5YR or 10YR; value of 3 or 4; chroma from 2 to 4

Reaction-strongly acid to slightly acid

Bw horizon:

Color—hue from 7.5YR to 2.5Y; value from 3 to 5; chroma from 3 to 6

Reaction-strongly acid to slightly acid

2C horizon:

- Color—hue of 10YR or 2.5Y; value from 4 to 6; chroma from 3 to 6
- Texture—silt loam, very fine sandy loam, or loamy fine sand
- Coarse fragment content—15 to 40 percent
- Channer content—15 to 40 percent
- Flagstone content-0 to 5 percent

Reaction-strongly acid to slightly acid

Tanacross Series

Taxonomic Classification

Coarse-loamy, mixed, superactive, subgelic
 Typic Histoturbels

Setting

Depth class: shallow to moderately deep over permafrost Drainage class: poorly drained Landform: alluvial terraces Parent material: organic matter over alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (122 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 179—Tanacross peat Location in survey area: SE¼, NE¼, Section 27, T1S, R2E, Fairbanks Meridian

Typical Pedon

Tanacross peat—on a level plain at 650 feet (198 m) elevation, under a black spruce forest:

- Oi—0 to 9 inches (0 to 22 cm); dark brown (7.5YR 3/2) moss peat; many very fine to coarse roots; very strongly acid (pH 4.8); clear smooth boundary.
- A—9 to 11 inches (22 to 27 cm); black (2.5Y 2.5/1) mucky silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; slightly acid (pH 6.2); broken irregular boundary.
- Bjjg—11 to 17 inches (27 to 42 cm); grayish brown (2.5Y 5/2) very fine sandy loam stratified with silt loam; massive; friable, slightly sticky and slightly plastic; many fine and medium strong brown (7.5YR 5/6) redoximorphic concentrations, common irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.4); gradual wavy boundary.
- Bjjfg—17 to 60 inches (42 to 152 cm); gray (2.5Y 5/1) and dark yellowish brown (10YR 4/6) permanently frozen very fine sandy loam

stratified with silt loam; massive; extremely firm, slightly sticky and slightly plastic; few irregular very dark gray (2.5Y 3/1) streaks; slightly acid (pH 6.2).

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm) Depth to permafrost: 10 to 28 inches (25 to 71 cm)

O horizon:

Color—hue from 5YR to 10YR; value from 2 to 5; chroma from 1 to 6

Texture—peat, mucky peat, or muck Reaction—extremely acid to strongly acid

B horizon:

- Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6
- Texture—stratas of silt loam, very fine sandy loam, fine sand or sand

Reaction-strongly acid to slightly acid

Bf horizon:

- Color—hue from 10YR to 5Y; value of 4 or 5; chroma from 1 to 6
- Texture—stratas of silt loam, very fine sandy loam, fine sand or sand

Reaction—strongly acid to slightly acid

Tanana Series

Taxonomic Classification

Coarse-loamy, mixed, superactive, subgelic
 Typic Aquiturbels

Setting

Depth class: shallow to moderately deep over permafrost Drainage class: poorly drained Landform: terraces Parent material: alluvium or loess over alluvium Slope: 0 to 2 percent Elevation: 400 to 650 feet (122 to 198 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Typical Pedon Location

Map unit in which located: 180—Tanana mucky silt loam

Location in survey area: NW¼, NW¼, Section 21, T1S, R2E, Fairbanks Meridian

Typical Pedon

Tanana mucky silt loam—on less than 1 percent slope at 470 feet (142 m) elevation, under a black spruce forest:

- Oi—0 to 3 inches (0 to 8 cm); dark brown (7.5YR 3/2) mat of slightly decomposed moss and forest litter; many roots; mycelia; very strongly acid (pH 4.7); abrupt wavy boundary.
- OA—3 to 5 inches (8 to 14 cm); black (10YR 2/1) mucky silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; common fine and medium roots; moderately acid (pH 5.6); clear broken boundary.
- Bjjg—5 to 17 inches (14 to 44 cm); mixed olive brown (2.5Y 4/3) and strong brown (7.5YR 5/6) silt loam stratified with very fine sandy loam; weak medium platy structure; very friable, nonsticky and nonplastic; common medium faint mottles of grayish brown (2.5Y 5/2); common fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); slightly acid (pH 6.5); clear broken boundary.
- Cjjg—17 to 25 inches (44 to 63 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) very fine sandy loam stratified with fine sandy loam; weak medium platy structure parting to weak thin platy; very friable, nonsticky and nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); few fine roots; common pockets and lenses of congeloturbate black (10YR 2/1); few pockets of fibric organic material at contact with permafrost; slightly acid (pH 6.5); abrupt wavy boundary.
- Cjjfg—25 to 72 inches (63 to 183 cm); mixed gray (5Y 5/1) and olive brown (2.5Y 4/3) permanently frozen silt loam stratified with sandy loam; massive, extremely firm, nonsticky and

nonplastic; many coarse prominent mottles of strong brown (7.5YR 4/6); many thin lenses of ice; few pockets of fibric organic material and wood; neutral (pH 6.7).

Range in Characteristics

Organic layer thickness: 2 to 8 inches (5 to 20 cm) Depth to permafrost: 16 to 40 inches (41 to 101 cm) Note: Buried A and O horizons may occur throughout the profile.

O horizon:

- Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma of 1 or 2
- Texture—slightly decomposed to moderately decomposed plant material

Reaction-very strongly acid to slightly acid

A horizon (when present):

Color—hue from 5YR to 2.5Y; value from 2 to 4; chroma from 1 to 3

Texture—silt loam and very fine sandy loam Reaction—moderately acid to neutral

Bg horizon:

- Color—hue from 7.5YR to N; value from 3 to 5; chroma from 0 to 6
- Texture—silt loam and very fine sandy loam, with occasional thin lenses of fine sandy loam and fine sand
- Reaction—slightly acid or neutral

Cg and Cf horizon:

- Color—hue from 10YR to N; value from 3 to 5; chroma from 0 to 4
- Texture—silt loam and very fine sandy loam, with occasional thin lenses of sandy loam and fine sand

Coarse fragment content—0 to 5 percent Reaction—slightly acid or neutral

Terric Cryofibrists

Taxonomic Classification

Terric Cryofibrists

Setting

Depth class: very deep Drainage class: very poorly drained Landform: depressions on flood plains and terraces Parent material: organic matter over alluvium Slope: 0 to 1 percent Elevation: 400 to 1,201 feet (122 to 366 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 136—Histels Location in survey area: UTM zone 6, 456439 m N, 717151 m E

Representative Pedon

- Terric Cryofibrist—in a level depression at 426 feet (130 m) elevation, under sedges:
- Oi1—0 to 10 inches (0 to 25 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; moderately acid (pH 5.8); gradual smooth boundary.
- C/Oi—10 to 12 inches (25 to 30 cm); very dark gray (10YR 3/1) peaty silt loam; massive; slightly sticky and slightly plastic; many very fine to medium roots; slightly acid (pH 6.2); gradual smooth boundary.
- Oi2—12 to 28 inches (30 to 71 cm); very dark brown (10YR 2/2) peat; many very fine to medium roots; slightly acid (pH 6.2); clear smooth boundary.
- Oa—28 to 40 inches (71 to 102 cm); black (10YR 2/1) muck; slightly acid (pH 6.2); clear smooth boundary.
- Cg—40 to 72 inches (102 to 183 cm); black (5Y 2.5/1) mucky silty clay loam; massive; sticky and plastic; neutral (pH 6.6).

Range in Characteristics

Organic layer thickness: 16 to 51 inches (41 to 130 cm)

Note: Particle size class of mineral layers is coarsesilty or fine-silty.

O horizon:

Color—value of 2 or 3; chroma from 1 to 3 Reaction—very strongly acid to neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, 10Y, 5GY, or N; value from 2 to 4; chroma from 0 to 2

Texture—silt loam, very fine sandy loam, silty clay loam, or mucky or peaty variants of these textures Reaction—moderately acid to neutral

Typic Cryaquents

Taxonomic Classification

Typic Cryaquents

Setting

Depth class: very deep Drainage class: poorly drained Landform: depressions on terraces, flood plains and footslopes Parent material: alluvium, colluvium, loess or lacustrine sediment Slope: 0 to 5 percent Elevation: 400 to 1,200 feet (122 to 366 m) Precipitation: 10 to 14 inches (25 to 36 cm) Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 133—Goldstream peat, 0 to 3 percent slopes

Location in survey area: SE¼, NW¼, Section 3, T1N, R1W, Fairbanks Meridian

Representative Pedon

- Typic Cryaquent—on a 3 percent slope at 750 feet (228 m) elevation, under scrub birch and sedge tussock:
- Oi—0 to 5 inches (0 to 12 cm); very dark brown (10YR 2/2) sedge and moss peat; many very fine and fine roots; strongly acid (pH 5.2); abrupt smooth boundary.
- Oe—5 to 7 inches (12 to 16 cm); black (10YR 2/1) mucky peat; many very fine and fine roots; very strongly acid (pH 5.0); abrupt wavy boundary.
- A—7 to 10 inches (16 to 24 cm); very dark brown (7.5YR 2.5/3) silt loam; massive; friable, slightly sticky and slightly plastic; few very fine to medium roots; strongly acid (pH 5.2); abrupt smooth boundary.

ACjjg—10 to 24 inches (24 to 61 cm); dark gravish

brown (2.5Y 4/2) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent brown (7.5YR 4/4) redoximorphic concentrations; many irregular black (7.5YR 2.5/1) streaks; few very fine and fine roots; moderately acid (pH 5.6); gradual wavy boundary.

Cg—24 to 72 inches (61 to 183 cm); gray (2.5Y 5/1) silt loam; massive; friable, slightly sticky and slightly plastic; common medium prominent strong brown (7.5YR 5/6) redoximorphic concentrations; moderately acid (pH 5.6).

Range in Characteristics

Organic layer thickness: 1 to 8 inches (3 to 20 cm) *Note:* Particle size class is coarse-silty or coarseloamy.

O Horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma from 1 to 3 Texture—peat, mucky peat, or muck Reaction—moderately acid to neutral

A horizon (when present):

Color—hue from 7.5YR to 2.5Y; value of 2 or 3; chroma from 1 to 3 Texture—silt loam, silty clay loam Reaction—very strongly acid to neutral

Cg horizon:

Color—hue of 2.5Y, 5Y, or N; value of 3 or 4; chroma of 1 or 2

Texture—silt loam, silty clay loam, or stratas of silt loam, very fine sand, loamy sand, or gravel Coarse fragment content—0 to 30 percent Reaction—moderately acid to neutral

2C horizon (when present):

Color—variegated Texture—sand or fine sand Coarse fragment content—0 to 50 percent Gravel content—0 to 50 percent Reaction—slightly acid to neutral

Typic Cryorthents

Taxonomic Classification

Typic Cryorthents

Setting

Depth class: very deep Drainage class: well drained

Landform: flood plains, terraces, and man-made features

Parent material: loamy or gravelly fill over alluvium Slope: 0 to 7 percent

Elevation: 400 to 1,200 feet (122 to 366 m)

Precipitation: 10 to 14 inches (25 to 36 cm)

Average annual temperature: 26 degrees F (-3 degrees C)

Representative Pedon Location

Map unit in which located: 184—Typic Cryorthents-Urban land complex

Location in survey area: UTM zone 6, 469107 m E, 7189193 m N

Representative Pedon

Typic Cryorthent—on a level flood plain at 450 feet (137 m) elevation, under a grass lawn:

- A—0 to 3 inches (0 to 8 cm); very dark grayish brown (10YR 3/2) gravelly loamy very fine sand; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine roots; 25 percent gravel; neutral (pH 6.6); clear smooth boundary.
- C1—3 to 30 inches (8 to 76 cm); light olive brown (2.5Y 5/3) silt loam stratified with very fine sandy loam, sand, and gravel; weak thin platy structure; very friable, nonsticky and nonplastic; few very fine roots; 15 percent gravel; neutral (pH 6.6); gradual smooth boundary.

2C2-30 to 63 inches (76 to 160 cm); light olive

brown (2.5Y 5/3) very fine sandy loam stratified with silt loam; weak thin platy structure; friable, nonsticky and nonplastic; few fine faint gray (2.5Y 6/1) redoximorphic depletions; slightly alkaline (pH 7.5); abrupt smooth boundary.

2C3—63 to 72 inches (160 to 183 cm); light brownish gray (2.5Y 6/2) sand; single grain; loose, nonsticky and nonplastic; slightly alkaline (pH 7.5).

Range in Characteristics

Depth to alluvium: 20 to greater than 60 inches (51 to > 152 cm)

Note: Particle size class is coarse-loamy, loamyskeletal, or sandy. Thin O horizons may be present in some pedons.

A horizon (when present):

Color-value from 2 to 4

Texture—very fine sandy loam and gravelly loamy very fine sand

Gravel content-0 to 35 percent

C horizon:

Color—value from 3 to 5; chroma from 2 to 4 Texture—stratas of loamy very fine sand, very fine sandy loam, loamy sand, and sandy loam Gravel content—0 to 40 percent Reaction—neutral to slightly alkaline

2C horizon:

Color-value from 3 to 5; chroma from 2 to 4

Texture—strata of sand, very fine sandy loam, loamy very fine sand, very fine sand, fine sand, and silt loam

Gravel content-0 to 50 percent

Reaction-neutral or slightly alkaline

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff, 1999). Soil formation is controlled by genetic and environmental factors of climate (including temperature and moisture effects), topography, parent material, and living organisms all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

The soils of the Greater Fairbanks Area are weakly developed as a result of the cold climate and the relatively young age of the parent materials. Thus, soil properties such as particle size composition and clay mineralogy are largely determined by the properties of the parent material. Parent materials in this area include alluvium, bedrock, and loess. Alluvium (material deposited by water) consists of stratified fine sand and silt underlain at some depth by sand and gravel. The surface alluvium is Holocene in age and flood deposition still occurs. Loess, consisting of windblown silt, covers most unflooded surfaces and is many feet thick in the lowlands. Loess is Pleistocene and Holocene in age and loess deposition continues at present. Loess on lower hillslopes has been redeposited down slope from higher elevations. Metamorphic rocks (mostly schist) and other bedrock of Precambrian age underlie the loess on upper hillslopes (Péwé et al., 1966; Weber et al., 1978). The bedrock is highly weathered in some places, probably due to hydrothermal activity rather than soil formation.

The major soil-forming processes in the Greater Fairbanks Area are accumulation of organic matter at the surface, oxidation and reduction of iron, cryoturbation, and impacts from permafrost and high water tables. Organic matter accumulates on the surface because decomposition cannot keep pace with the annual addition of dead plant material. Decomposition is inhibited by cold temperatures and, in many places, by wetness and a consequent lack of soil oxygen. Nearly all surfaces, except where floods or humans frequently disturb them, have some surface organic layer. The thickest accumulations of surface organic matter occur on the coldest and wettest soils. For example, wet soils in depressions and in areas with permafrost have the thickest organic surface layer. The warmest and driest soils, which occur on hilltops and on sandy and gravelly flood plains, may have only an inch or two of surface organic matter.

Weathering of primary minerals in soils releases iron, which may be either oxidized or reduced depending on the availability of oxygen. In dry, wellaerated soils iron oxidizes to form a reddish Bw horizon. Bw horizons are best developed in the soils of hillslopes, such as Fairbanks and Steese soils, and are weak or absent in the young soils of flood plains, such as Salchaket and Jarvis soils. In the very wettest soils iron is reduced because of a lack of oxygen, resulting in grayish soil colors. Commonly, alternating wet and dry conditions result in both reduced (grayish) and oxidized (reddish) zones in the soil.

Cryoturbation results in contorted and broken horizons. Cryoturbation is common in soils with permafrost.

Permafrost has several important impacts on soil. Since permafrost is nearly impervious, water perches above the permafrost and saturates the soil. Some permafrost soils contain large amounts of ground ice, and subsidence can occur if surface disturbance results in warming of the soil. Permafrost soils on thick Pleistocene loess deposits (Bolio, Lemeta, Goldstream, Chatanika, Minto, and Histel soils) have the greatest amount of ground ice and hence the greatest risk of thaw subsidence.

The gravel deposits underlying the alluvial plain in the Greater Fairbanks Area are saturated with ground water. In soils such as Piledriver, Eielson, North Pole, and Fubar this ground water is high enough to occur in the soil profile and affect land use.

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Glossary

- Ablation till. Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
- Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- 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.
- Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.
- Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.
- 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.
- Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Aspect. The direction in which a slope faces.

- Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.
- 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	
Low	3 to 6
Moderate	6 to 9
High	
Very high	

- **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.
- **Boulders.** Rock fragments larger than 2 feet (61 cm) in diameter.
- **Breast height.** An average height of 4.5 feet (1.4 m) above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

- **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.

- **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 baseexchange capacity but is more precise in meaning.
- **Channery soil material.** 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 cm) along the longest axis. A single piece is called a channer.
- **Cirque.** A semicircular, concave, bowllike area that has steep faces primarily resulting from glacial ice and snow abrasion.
- **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.
- **Closed depression.** A low area completely surrounded by higher ground and having no natural outlet.
- **Coarse fragments.** Mineral or rock particles larger than 2 millimeters in diameter.
- **Coarse textured soil.** Sand or loamy sand. Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.
- **Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.
- **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 cm) 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.
- **Congeloturbate.** Soil material disturbed by frost action.
- **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."
- **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 (25 cm) and 40 or 80 inches (102 or 203 cm).
- **Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- **Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- **Cryoturbation (frost churning).** The mixing of the soil resulting in irregular or broken horizons, organic matter accumulation on the permafrost table, and oriented rock fragments due to frost action.
- 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.

Cutbanks cave (in tables). The walls of excavations

tend to cave in or slough.

- Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).
- 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.
- **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.
- **Eolian soil material.** Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on 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.
- **Fan terrace.** A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

- **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 cm) 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 (305 m) 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.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Fragipan. A loamy, brittle subsurface horizon low in

porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

- **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.
- **Glacial till.** Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.
- **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.
- **Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 mm to 7.6 cm) 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 cm) in diameter.
- **Ground ice.** Term used to denote bodies of more or less clear ice in permanently frozen ground. Ground ice may occur as segregated ice, disseminated ice, and massive ice.
- **Ground water**. Water filling all the unblocked pores of the material below the water table.
- Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica,

calcium carbonate, or other substance.

- 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.
- **Hill.** A natural elevation of the land surface, rising as much as 1,000 feet (305 m) 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.
- **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.
- Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.
- 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.
- Large stones (in tables). Rock fragments 3 inches (7.6 cm) or more across. Large stones adversely affect the specified use of the soil.
- 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 shrinkswell 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.
- Loess. Fine grained material, dominantly of siltsized particles, deposited by wind.
- 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.

- 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.
- Minor component. A component of limited extent that may or may not be present.
- **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 in); medium, from 5 to 15 millimeters (about 0.2 to 0.6 in); and coarse, more than 15 millimeters (about 0.6 in).
- **Mountain.** A natural elevation of the land surface, rising more than 1,000 feet (305 m) 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.

- **Nose slope.** A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.
- 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.
- 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.
- **Pan.** A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.
- 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 m to 10 square m), 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 two or more years.
- **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.
- **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.

- **Rangeland.** Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.
- **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.
- Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.
- **Riverwash**. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.
- **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.
- Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.
- 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.
- 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 winddeposited 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.
- Shale. Sedimentary rock formed by the hardening of a clay deposit.
- **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.
- 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 2 percent
Gently sloping	2 to 4 percent
Moderately sloping.	4 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steepM	ore than 45 percent

- **Slope** (in tables). Slope is great enough that special practices are requied to ensure satisfactory performance of the soil for a specific use.
- **Sloughed till.** Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.
- **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 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.
- **Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- 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).

- **Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth.
- Substratum. The part of the soil below the solum.
- **Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer.
- **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 cm). 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.
- **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."

- Thermokarst. Subsidence of the ground caused by melting of ground ice.
- 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.
- Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.
- **Tussock.** A small mound, typically 0.5 to 1 foot (15 to 30 cm) high, consisting of densely packed dead parts of sedges or grasses.

- **Upland.** Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.
- Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded 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.
- 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.

Tables

	-	Temperatur	e (Degrees	s F)			l P	recipitat	ion (Inche	es)	
		I I			2 years in			I 2 years in			
		1	1		ill have	Average		l <u>10</u>	will have	Average	Average
Manada		1		Max.	Min.	I number of	•			I number of	total
Month	Average		Average		I temp.	growing	Average		More	days with	Isnowfall
	daily	l daily	1		llower	degree		than	l than	0.1 inch	
	l maximum	<u>i minimum</u> I		than	<u>l than</u>	<u> days*</u>			1	or more	<u> </u>
January	, -1.6	 -18.5	-10.0	' 39	-53	0	0.47	0.17	0.71	' 1	' 8.8
February	7.2	-14.4	-3.6	42	-47	0	0.41	0.10	0.65	1	8.2
March	23.8	-1.6	11.1	48	-35	0	0.38	0.11	0.64	1	6.5
April	41.0	20.4	30.7	64	-11	0	0.33	0.11	0.50	0	3.8
May	59.3	38.0	48.6	78	21	197	0.61	0.26	0.91	1	0.5
June	70.1	49.5	59.8	88	37	594	1.37	0.69	1.96	3	0.0
July	72.3	52.5	62.4	88	42	695	1.85	1.11	2.52	4	0.0
August	66.3	47.2	56.8	84	32	520	1.96	0.98	2.81	5	0.0
September	54.8	36.2	45.5	73	19	71	0.95	0.32	1.47	3	1.0
October	32.0	18.1	25.0	57	-13	1 0	0.92	0.46	1.32	2	11.7
November	10.9	l -5.6	2.6	40	-38	1 0	0.81	0.31	1.22	2	15.1
December	1.9 	-14.7 	-6.4 	39 	-49 	0 	0.86 	0.27 	1.39 	2 	14.9
Yearly:		 	 	 				 		 	
Average	 36.5	 17.3	 26.9	 		. —			——	 	
Extreme	96	l -62	. —-	90	 -55	i		. —	. —		
Total		 	 			 2,077	 10.91	 8.25	 13.30	 25	 70.4

Table 1.—Temperature and Precipitation at Fairbanks, Alaska

Average number of days per year with at least 1 inch of snow on the ground: 191

*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 degree F). It is calculated for the period between the last and first 28 degree F frost.

	I Tempe	Temperature		
Probability	 24°F or lower _	 28°F or lower 	32°F or lower	
Last freezing temperature in spring:				
1 year in 10 later than—	May 1	May 13	May 25	
2 year in 10 later than—	April 28	May 9	May 22	
5 year in 10 later than—	April 22	May 2	May 15	
First freezing temperature in fall:				
1 yr in 10 earlier than—	September 15	I September 6	August 22	
2 yr in 10 earlier than—	September 19	September 11	August 27	
5 yr in 10 earlier than—	I September 28	I September 20	September 5	

Table 2.—Probability of Frost at Fairbanks, Alaska

Table 3.—Growing Season at Fairbanks, Alaska

	l Daily Minimu	Im Temperature	
Probability	l number of days > 24°F	number of days > 28°F	number of days > 32°F
9 years in 10	143	124	I 93
8 years in 10	148	130	 99
5 years in 10	158	1 140	112
2 years in 10	168	151	125
1 year in 10	174	1 156	131

Table 4.—Acreage and Proportionate Extent of the Area

(An * under "Percent" indicates less than 0.1 percent)

Map symbol	Map unit name	Acres	Percent
101	l IBolio peat	3,597	 1.3
102	IBradway very fine sandy loam	190	*
103	IChatanika mucky silt loam, 0 to 3 percent slopes	8,535	3.2
104	IChatanika mucky silt loam, 3 to 7 percent slopes	9,294	3.4
105	Chatanika mucky silt loam, 7 to 12 percent slopes	1,291	0.5
106	IChatanika mucky silt loam, 12 to 20 percent slopes	41	*
107	IChatanika-Goldstream complex	8,081	3.0
108	IChena very fine sandy loam	166	*
109	IDumps, landfill	200	*
110	IDumps, mine	2,330	0.9
111	IEielson fine sandy loam		2.3
	IEielson-Piledriver complex		2.5
	IEielson-Tanana complex		0.5
114	Ester peat, 20 to 45 percent slopes		1.0
	Ester peat, very steep		*
	IFairbanks silt loam, 3 to 7 percent slopes		0.5
117	IFairbanks sill loam, 7 to 12 percent slopes		2.2
	IFairbanks sill loam, 12 to 20 percent slopes		3.6
	IFairbanks sill loam, 20 to 30 percent slopes		1.4
	IFairbanks sill loam, 30 to 45 percent slopes		0.2
	Fairbanks silt loams, strongly sloping and steep		
	IFairbanks-Steese complex, 12 to 20 percent slopes		1
	IFairbanks-Steese complex, 20 to 30 percent slopes		0.3
	IFubar-Piledriver complex, occasionally flooded		0.7
125	IGilmore silt loam, 3 to 7 percent slopes		0.1
126	IGilmore silt loam, 7 to 12 percent slopes		0.3
127	IGilmore sit loam, 12 to 20 percent slopes		0.4
128	Gilmore silt loam, 20 to 30 percent slopes		0.7
129	IGilmore silt loam, 30 to 45 percent slopes		0.5
130	Gilmore silt loam, 45 to 70 percent slopes		0.2
131	Gilmore-Ester complex, 12 to 70 percent slopes		0.3
132	Gilmore-Steese complex, 3 to 15 percent slopes		0.6
133	Goldstream peat, 0 to 3 percent slopes		4.3
134	IGoldstream peat, 3 to 7 percent slopes		
135	IGoldstream-Histels complex, 0 to 3 percent slopes		1
136 137	IHistels Jarvis fine sandy loam		0.6 1.1
138	Jarvis-Chena complex		0.8
139	Jarvis-Salchaket complex		8.3
140	Lemeta peat		1 1.0
	Liscum-Noonku complex	,	0.4
	Minto silt loam, 0 to 3 percent slopes		*
	Minto silt loam, 3 to 7 percent slopes		2.9
	Minto sit loam, 7 to 12 percent slopes		2.3
	Minto-Chatanika complex. 0 to 3 percent slopes		1.8
46	Minto-Chatanika complex, 3 to 7 percent slopes	,	1.7
	Minto-Chatanika complex, 7 to 12 percent slopes		0.6
	Minto-Chatanika complex, 12 to 20 percent slopes		*
49	Mosquito mucky peat		0.9
50	Mosquito-Noonku complex	,	0.4
	Noonku very fine sandy loam		0.6
52	North Pole fine sandy loam		0.6
	North Pole-Mosquito_Liscum complex		0.3
	North Pole-Noonku complex		1.2
	IPeede silt loam		*
56	IPeede-Mosquito complex	696	0.3
57	IPiledriver very fine sandy loam	462	0.2
58	IPiledriver-Eielson complex	4,421	1.6
	IPiledriver-Fubar complex		1.4
60	IPits, gravel		0.5
	IPits, quarry		*
	IRiverwash		0.3
	ISalchaket very fine sandy loam		2.6
	ISalchaket-Typic Cryorthents complex		0.4
65	ISaulich peat, 3 to 7 percent slopes	2,975	1.1
66	ISaulich peat, 7 to 12 percent slopes	924	0.3
67	ISaulich peat, 12 to 20 percent slopes	242	*
	ISaulich-Minto complex, 3 to 12 percent slopes		1.4
69	ISaulich-Minto complex, 12 to 20 percent slopes		*
70	Steese silt loam, 3 to 7 percent slopes	130	*

Map symbol	I Map unit name I	Acres	l Percent
171	 Steese silt loam, 7 to 12 percent slopes	1,124	I I 0.4
172	Steese silt loam, 12 to 20 percent slopes	4,721	1.7
173	Steese silt loam, 20 to 30 percent slopes	8,286	3.1
174	Steese silt loam, 30 to 45 percent slopes	1,391	0.5
175	Steese silt loam, 45 to 70 percent slopes	13	*
176	Steese-Gilmore complex, 12 to 20 percent slopes	1,301	0.5
177	ISteese-Gilmore complex, 20 to 30 percent slopes	1,471	0.5
178	Steese-Gilmore complex, 30 to 45 percent slopes	404	0.1
179	ISteese-Gilmore complex, 45 to 70 percent slopes	122	*
180	Tanacross peat	2,000	0.7
181	ITanana mucky silt loam	13,263	4.9
182	Tanana-Mosquito complex	1,299	0.5
183	Typic Cryaquent, Histic Cryaquept, and Terric Cryofibrist soils	1,464	0.5
184	Typic Cryorthents, pit spoil	1,836	0.7
185	Typic Cryorthents-Urban land complex	2,119	0.8
186	IUrban land	12,639	4.7
87	Water	21,342	7.9
	I Total	269,860	I 100.0

Table 4. Acreage and Proportionate Extent of the Area--Continued

Table 5. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol	l I Depth	I USDA texture	Classificat	ion	l _l Liquid	l I Plas-
and soil name			 Unified	I AASHTO	limit 	ticity index
	l In.				Pct.	1
01:	1	1	1	1	1	1
Bolio	12-16	IPeat IMucky peat IPermanently frozen mucky peat	PT PT 	A-8 A-8 	0-0 0-0 0-0	NP NP NP
02:	İ			i	i	i
Bradway	7-10 10-26	ISlightly decomposed plant material IMucky silt loam IStratified very fine sandy loam to fine sand IPermanently frozen material	PT ML, OL ML, SM 	A-8 A-5 A-4 	0-0 40-50 25-30 	NP NP-10 NP-5
03:	I	1		I	1	i
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4 	0-0 70-100 25-35 	NP NP-15 NP-5
104:		1			1	1
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4 	0-0 70-100 25-35 	NP NP-15 NP-5
105:		1				
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4 	0-0 70-100 25-35 	NP NP-15 NP-5
106:		1	1	1		1
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4	0-0 70-100 25-35 	NP NP-15 NP-5
107:		1				
Chatanika	4-6 6-21	ISlightly decomposed plant material IMucky silt loam ISilt loam IPermanently frozen material	PT MH, OH ML 	A-8 A-5 A-4	0-0 70-100 25-35 	NP NP-15 NP-5
Goldstream	9-12 12-20	I IPeat, mucky peat IMucky silt Ioam ISilt Ioam IPermanently frozen material	 PT ML, OL ML 	 A-8 A-4, A-5 A-4 	 0-0 30-50 25-35 	 NP NP-10 NP-10
108:		1				
Chena	4-9	ISlightly decomposed plant material IStratified fine sand to silt loam, fine sandy loam, fine sand ICoarse sand, sand, very gravelly sand	PT SM, ML GP, SP	A-8 A-4 A-1	0-0 25-30 0-0	NP NP-5 NP
109: Dumps, landfill		 	 	¦	 	
110: Dumps, mine		I 	 	¦ —	 	
111:		1				1
Eielson	2-49 49-71	ISlightly decomposed plant material IVery fine sandy loam IStratified silt loam to fine sand	PT ML ML, SM	A-8 A-4 A-4	0-0 25-30 25-30	NP NP-5 NP-5
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-1	0-0 	NP

Table 5	Engineering	Index	Properties-	-Continued
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Map symbol	l I Depth	I USDA texture	Classification		 Liquid	 Plas-
and soil name		 	 Unified	AASHTO	limit 	l ticity l index
	In.		'' 		Pct.	·
12:	1	1	1		1	
Eielson		Slightly decomposed plant material	I PT I	A-8	0-0	NP
	2-49 49-71	IVery fine sandy loam IStratified silt loam to fine sand	ML ML, SM	A-4 A-4	25-30 25-30	INP-5 INP-5
		Extremely gravelly sand, gravelly sand, very gravelly sand	GP-GM	A-4 A-1	0-0	NP
iledriver	 0-3	I ISlightly decomposed plant material	 PT	A-8	 0-0	I I NP
		Stratified fine sand to silt loam, very fine sandy loam	I ML I	A-4	25-30	INP-5
		Stratified sand to fine sand to very fine sandy loam	SM, ML	, -	20-25	INP-5
	33-72 	ISand, very gravelly sand	IGP-GM, SP-SM 	A-1	0-0 	NP
13: Tiploop		 Clightly decomposed plant material		A 0		
Eielson		ISlightly decomposed plant material IVery fine sandy loam	PT ML	A-8 A-4	0-0 25-30	NP NP-5
		IStratified silt loam to fine sand	I ML, SM	A-4	25-30	INP-5
	71-72	Extremely gravelly sand, gravelly sand,	GP-GM	A-1	0-0	I NP
	1	l very gravelly sand	I			
Tanana		Slightly decomposed plant material	I PT I	A-8	i 0-0	I NP
	3-6 6-25	ISilt loam, mucky silt loam IVery fine sandy loam, stratified silt loam to loamy fine sand	ML, OL ML	A-4 A-4	30-40 30-40	INP-10 INP-10
		Permanently frozen material		A-4		
14:		1			1	
Ester	0-9	IPeat	i pt i	A-8	0-0	I NP
		IPermanently frozen mucky silt loam	I ML I	A-4	25-30	INP-5
		IPermanently frozen very channery silt loam IPermanently frozen weathered bedrock	I GM I	A-2, A-4	 	NP
15:	1				1	1
Ester	0-9	lPeat	I PT I	A-8	0-0	NP
		Permanently frozen mucky silt loam	I ML I	A-4	25-30	INP-5
		IPermanently frozen very channery silt loam IPermanently frozen weathered bedrock	I GM I	A-2, A-4	 	NP
16:		1	1		1	
Fairbanks		Slightly decomposed plant material	I PT I	A-8	0-0	I NP
		ISilt loam	ML ML	A-4	30-40 25-35	INP-10 INP-10
		ISilt loam, silt I		A-4	25-35	
17: =airbanks	 0-3	I ISlightly decomposed plant material	 PT	A-8	 0-0	 NP
andamo		ISilt Ioam	I ML I	A-4	30-40	INP-10
	30-72	ISilt loam, silt	I ML I	A-4	25-35 	INP-10
18:	i	, 	, , , , ,		i	Ì
Fairbanks		ISlightly decomposed plant material	I PT I	A-8	0-0	
		ISilt loam ISilt loam, silt	I ML I I ML I	A-4 A-4	30-40 25-35	INP-10 INP-10
19:	1	1			1	1
Fairbanks	0-3	ISlightly decomposed plant material	' PT	A-8	0-0	I NP
	3-30	ISilt Ioam	ML	A-4	30-40	INP-10
	30-72 	ISilt loam, silt	I ML I	A-4	25-35 	INP-10
20: Tairbanka		 Clinktly decomposed plant material		A 0		
-airbanks	0-3 3-30	ISlightly decomposed plant material ISilt Ioam	PT ML	A-8 A-4	0-0 30-40	NP NP-10
		ISilt loam, silt	I ML I	A-4	25-35	INP-10
21:	1	1				1
 airbanks, strongly sloping		ISlightly decomposed plant material	I PT	A-8	0-0	I NP
	3-30	ISilt loam	I ML I	A-4	30-40	INP-10
	30-72 	ISilt loam, silt I	I ML I	A-4	25-35 	INP-10
airbanks, steep		Slightly decomposed plant material	I PT I	A-8	0-0	
		ISilt loam ISilt loam, silt	ML ML	A-4 A-4	30-40 25-35	INP-10 INP-10
	1 00 72					1 10

Map symbol	l I Depth	I USDA texture	Classification	۱ 	l Liquid	 Plas-
and soil name			l I Unified	AASHTO	limit	ticity inde
	In.		1		Pct.	·
22:		1			1	1
airbanks		Slightly decomposed plant material	I PT	A-8	0-0	NP
	3-30	ISilt loam ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1
				A-4		
Steese		Slightly decomposed plant material	I PT	A-8	0-0	I NP
	2-5 5-27	ISilt loam ISilt, silt loam	I ML	A-4 A-4	25-35 25-35	INP-1 INP-1
		IVery channery silt loam, channery silt loam, extremely	I GM	A-2, A-4	0-0	NP
		I channery silt loam	I		1	1
	33-72	IWeathered bedrock				1
23:	i	i	i		i	i
airbanks		Slightly decomposed plant material	I PT	A-8	0-0	
	3-30 30-72	ISilt loam ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1 INP-1
	I.		I			1
Steese	0-2 2-5	ISlightly decomposed plant material ISilt loam	PT ML	A-8 A-4	0-0 25-35	NP NP-1
	5-27	ISilt, silt loam		A-4 A-4	25-35	INP-1
		Very channery silt loam, channery silt loam, extremely	I GM	A-2, A-4	0-0	I NP
		I channery silt loam IWeathered bedrock				
	33-72		I			
24:		1	!		1	
ubar		ISlightly decomposed plant material IStratified fine sand to silt loam, very fine sandy loam	PT ML	A-8 A-4	0-0 25-30	NP NP-5
		ISand, extremely gravelly sand, fine sand, very gravelly	GP, GP-GM,	A-4	0-0	
	I	I coarse sand	I SP, SP-SM		1	1
Piledriver	0-3	I ISlightly decomposed plant material	I PT	A-8	 0-0	I I NP
		IStratified fine sand to silt loam, very fine sandy loam	I ML	A-4	25-30	INP-5
		Stratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	INP-5
	33-72	ISand, very gravelly sand	IGP-GM, SP-SM	A-1	0-0 	NP
25:		1	!		1	1
Gilmore	0-3 3-6	ISlightly decomposed plant material ISlit loam	PT ML	A-8 A-4	<u> </u>	 NP-10
		ISilt loam, silt	I ML	A-4	25-35	INP-1
		IVery channery silt loam, extremely channery silt loam	I GM	A-2, A-4	!	NP
	19-72	IWeathered bedrock				
26:	i	i	i		i	i
Gilmore		ISlightly decomposed plant material ISlit loam	PT ML	A-8		 INP-1
	3-6 6-12	ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1
	12-19	Very channery silt loam, extremely channery silt loam	I GM	A-2, A-4	! —-	NP
	19-72	IWeathered bedrock	I			
27:		i	i		i	i
Gilmore		Slightly decomposed plant material	I PT	A-8		
	3-6 6-12	ISilt loam ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1
	12-19	Very channery silt loam, extremely channery silt loam	I GM	A-2, A-4	I —-	NP
	19-72	IWeathered bedrock				
28:		i i			Ì	i
Gilmore		Slightly decomposed plant material	I PT	A-8		
	3-6 6-12	ISilt loam ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1 INP-1
		IVery channery silt loam, extremely channery silt loam	I GM	A-4 A-2, A-4		NP
	19-72	IWeathered bedrock				
29:		1			1	
Gilmore		Slightly decomposed plant material	I PT	A-8	I	i
	3-6 6-12	ISilt loam ISilt loam, silt	I ML	A-4 A-4	30-40 25-35	INP-1 INP-1
		IVery channery silt loam, extremely channery silt loam		A-4 A-2, A-4		INP-I
		Weathered bedrock		, .	1	i —

Map symbol	l I Depth	I USDA texture	Classification		l I Liquid	l I Plas-
and soil name		 	l Unified I Unified	AASHTO	limit 	l ticity l index
	 In.		;; 		Pct.	- ;
30:			i		i	i
Gilmore		ISlightly decomposed plant material ISilt Ioam	PT ML	A-8 A-4	 30-40	
		ISilt loam, silt		A-4 A-4	25-35	INP-10
	12-19	IVery channery silt loam, extremely channery silt loam	I GM I	A-2, A-4		NP
	19-72	IWeathered bedrock				
31:		i				i i
ailmore		ISlightly decomposed plant material ISilt Ioam	I PT I I ML I	A-8 A-4	<u></u> 30-40	 NP-10
		ISilt loam, silt	I ML I	A-4 A-4	25-35	INP-10
	12-19	IChannery silt loam, very channery silt loam, extremely	GM	A-2, A-4	I —	I NP
		I channery silt loam			1	1
	19-72	IWeathered bedrock			<u> </u>	
ster		IPeat	I PT I	A-8	0-0	I NP
		Permanently frozen mucky silt loam	I ML I I GM I	A-4	25-30 	NP-5 NP
		IPermanently frozen very channery silt loam IPermanently frozen weathered bedrock		A-2, A-4 	<u> </u>	<u> </u>
32:	l	1				
àilmore		' ISlightly decomposed plant material	I PT I	A-8	i —-	i —-
		ISilt loam	I ML I	A-4	30-40	INP-10
		ISilt loam, silt IVery channery silt loam, extremely channery silt loam	I ML I I GM I	A-4 A-2, A-4	25-35 	INP-10
		Weathered bedrock		, <u>,</u> , <u>,</u> , <u>,</u>	i —	<u> </u>
Steese	 0-2	ISlightly decomposed plant material		A-8	 0-0	 NP
		ISilt Ioam	i ML i	A-4	25-35	INP-10
		ISilt, silt loam	I ML I	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt loam, extremely I channery silt loam	I GM I	A-2, A-4	0-0	NP
	33-72	Weathered bedrock	i		i	i—-
33:		1				1
Goldstream		IPeat, mucky peat	I PT I	A-8	0-0	I NP
		IMucky silt loam ISilt loam	ML, OL ML	A-4, A-5	30-50 25-35	INP-10 INP-10
		Permanently frozen material				<u> </u>
34:		1				1
Goldstream		IPeat, mucky peat	I PT I	A-8	0-0	I NP
		IMucky silt loam ISilt loam	I ML, OL	A-4, A-5	30-50	INP-10
		IPermanently frozen material	I ML I	A-4 	25-35 	INP-10
35:		1				1
Goldstream	0-9	Peat, mucky peat	I PT	A-8	I 0-0	i np
		Mucky silt loam	I ML, OL	A-4, A-5	30-50	INP-10
		ISilt loam IPermanently frozen material	I ML I	A-4	25-35 	INP-10
35:						1
35: Histels	0-12	lPeat	I PT I	A-8	 0-0	I NP
		Mucky peat	I PT I	A-8	0-0	NP
		IPermanently frozen mucky peat IPermanently frozen material			0-0 <u></u>	NP
00.					1	i
36: tistels	 0-12	ı IPeat	 PT	A-8	 0-0	I I NP
		Mucky peat	I PT	A-8	0-0	NP
		Permanently frozen mucky peat			0-0	NP
	26-72 	IPermanently frozen material				
37:		 Mederately.decomposed plant meteric				
arvis		IModerately decomposed plant material IStratified fine sand to silt loam, very fine sandy loam	I PT I I ML I	A-8 A-4	0-0 25-30	NP NP-5
		IStratified sand to fine sand to very fine sandy loam	I ML, SM	A-4, A-3	20-25	INP-5
		IVery gravelly sand	IGP-GM, SP-SM I		0-0	NP

Map symbol	l I Depth	I USDA texture	Classification	١	l I Liquid	 Plas-
and soil name		 	 Unified 	I AASHTO	limit 	l ticity l index
	In.		1	 	Pct.	
38:	l	i	i		i	i
Jarvis		Moderately decomposed plant material	I PT	A-8	0-0	
	3-6 6-24	IStratified fine sand to silt loam, very fine sandy loam IStratified sand to fine sand to very fine sandy loam	ML ML, SM	A-4 A-4, A-3	25-30 20-25	INP-5 INP-5
		IVery gravelly sand	IGP-GM, SP-SM		0-0	NP
Chena	 0-4	ISlightly decomposed plant material	 PT	 A-8	 0-0	 NP
	4-9	Stratified fine sand to silt loam, fine sandy loam, fine sand	SM, ML	A-4	25-30	INP-5
	9-72 	Coarse sand, sand, very gravelly sand	GP, SP 	A-1 	0-0 	NP
39:	Ì	1				Ì
Jarvis	0-3 3-6	IModerately decomposed plant material IStratified fine sand to silt loam, very fine sandy loam	PT ML	A-8 A-4	0-0 25-30	NP NP-5
	6-24	Stratified sand to fine sand to very fine sandy loam	ML, SM	A-4, A-3	20-25	INP-5
		IVery gravelly sand	IGP-GM, SP-SM	,	0-0	I NP
Salchaket		I ISlightly decomposed plant material	I I PT	 A-8	 0-0	I I NP
		IVery fine sandy loam	I ML	A-4	25-30	INP-5
		IStratified silt loam to fine sand IVery gravelly sand	ML, SM GP-GM, SP-SM	A-4 A-1	25-30 0-0	NP-5 NP
40: _emeta	 0-20	l IPeat	 PT	 A-8	 0-0	I I NP
		IPermanently frozen mucky peat			0-0	I NP
41:	I	1	1		1	1
_iscum		IPeat	I PT	A-8	0-0	NP
	3-11	Muck	PT	A-8	0-0	NP NP-10
		IMucky silt loam IStratified silt loam to loamy fine sand	ML, OL CL, CL-ML, ML	A-4, A-5 A-4	30-50 0-30	INP-10
		IVery gravelly sandy loam	SC-SM	A-2	0-15	INP-5
Noonku	0-2	IModerately decomposed plant material	 PT	 A-8	 0-0	I I NP
	2-6	ISilt loam	I ML	A-4	20-35	INP-10
	6-47 47-72	IStratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	ML, SM GP-GM	A-3, A-4 A-1	20-25 0-0	INP-5 I NP
42:	1		1		1	1
42. Vinto		ISlightly decomposed plant material	PT	A-8	0-0	I NP
	5-9	ISilt loam	I ML	A-4	25-40	INP-10
	9-16 16-72	ISilt loam, silt ISilt loam, silt	I ML I ML	A-4 A-4	15-25 15-25	INP-5 INP-5
43:	1	1			1	
Vinto		ISlightly decomposed plant material	I PT	I A-8	0-0	I NP
	5-9	ISilt loam	I ML	A-4	25-40	INP-10
		ISilt loam, silt ISilt loam, silt	I ML I ML	A-4 A-4	15-25 15-25	INP-5 INP-5
44:	I	1			1	1
44. Minto		ISlightly decomposed plant material	I PT	A-8	0-0	I NP
	5-9	ISilt loam	I ML	A-4	25-40	INP-1
		ISilt loam, silt ISilt loam, silt	I ML I ML	A-4 A-4	15-25 15-25	INP-5 INP-5
45:	1	1			1	1
45. Minto		ISlightly decomposed plant material	PT	A-8	0-0	 NP
	5-9	ISilt loam	I ML	A-4	25-40	INP-10
	9-16 16-72	ISilt loam, silt ISilt loam, silt	I ML I ML	A-4 A-4	15-25 15-25	INP-5 INP-5
Chatapika	l I	I Slightly decomposed plant material	 PT	I	1	1
Chatanika	0-4 4-6	ISlightly decomposed plant material IMucky silt loam	PT MH, OH	A-8 A-5	0-0 70-100	NP NP-15
	6-21	ISilt Ioam	ML	A-4	25-35	INP-5
		Permanently frozen material	L	I	I —-	I

Map symbol	l I Depth	I USDA texture	Classificati		 Liquid	 Plas-
and soil name			l I Unified		l limit	ticity index
	I	۱ ۱	I	_ ! !	Pct.	
46:		1	 		1	1
Minto		Slightly decomposed plant material	I PT	A-8	0-0	I NP
		ISilt Ioam ISilt Ioam, silt	I ML I ML		25-40 15-25	INP-10 INP-5
		ISilt loam, silt			15-25	INP-5
Chatanika	 0-4	 Slightly decomposed plant material	 PT	 A-8	 0-0	 NP
/1ata11ika		Mucky silt loam	і мн, он		70-100	INP-15
		ISilt loam	ML	A-4	25-35	INP-5
	21-72	IPermanently frozen material	 	1	 	
17: 1-1-		 Olishthada a series and related to a table in the				
linto		ISlightly decomposed plant material ISilt loam	PT ML	A-8 A-4	0-0 25-40	NP NP-10
		ISilt loam, silt	I ML		15-25	INP-5
	16-72	ISilt loam, silt		A-4	15-25 	INP-5
hatanika	0-4	ISlightly decomposed plant material	I PT	A-8	 0-0	NP
		IMucky silt loam ISilt loam	MH, OH ML		70-100 25-35	INP-15 INP-5
		Permanently frozen material				<u> </u>
18:					1	1
into		ISlightly decomposed plant material	I PT	A-8	 0-0	NP
		ISilt loam	I ML		25-40	INP-10
		ISilt loam, silt ISilt loam, silt	I ML I ML		15-25 15-25	INP-5 INP-5
hatanika		 Clinktly decomposed plant material		•		
hatanika		ISlightly decomposed plant material IMucky silt loam	PT MH, OH		0-0 70-100	NP NP-15
	6-21	ISilt loam	I MĹ		25-35	INP-5
	21-72	Permanently frozen material	1			
9:	•			i .	i .	i
losquito		IPeat ISilt loam, very fine sandy loam, stratified silt loam	PT ML	A-8 A-4	0-0 30-40	NP NP-5
	I	I to loamy fine sand				
	24-72	Permanently frozen material	1			
50:		l	l		i	i
losquito		IPeat ISilt loam, very fine sandy loam, stratified silt loam	PT ML	A-8 A-4	0-0 30-40	NP NP-5
	I.	I to loamy fine sand				
	24-72	Permanently frozen material	1		!	
loonku	0-2	IModerately decomposed plant material	I PT	A-8	 0-0	NP
		ISilt loam	I ML	A-4	20-35	INP-10
		IStratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	I ML, SM GP-GM	A-3, A-4 A-1	20-25 0-0	INP-5 I NP
4.			1	1	1	1
51: oonku	0-2	IModerately decomposed plant material	I PT	I A-8	I 0-0	I NP
		ISilt loam	I ML	A-4	20-35	INP-10
		IStratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	ML, SM GP-GM	A-3, A-4 A-1	20-25 0-0	INP-5 I NP
·0.			1	1	1	1
52: Iorth Pole	0-2	ISlightly decomposed plant material	I PT	 A-8	I 0-0	I NP
	2-4	Highly decomposed plant material	I PT	A-8	0-0	NP
		IStratified fine sand to silt loam IVery gravelly sand, extremely gravelly sand, gravelly	SM, ML GP-GM	A-4 A-1	0-30 0-0	INP-10
		I coarse sand				1
53:		1	 	1		1
lorth Pole		Slightly decomposed plant material	I PT	A-8	0-0	I NP
		IHighly decomposed plant material IStratified fine sand to silt loam	PT SM, ML	A-8 A-4	0-0 0-30	NP NP-10
		IVery gravelly sand, extremely gravelly	GP-GM	A-4	1 0-30 1 0-0	NP
		I sand, gravelly coarse sand	I	1	I	1

Map symbol	l I Depth	I USDA texture	Classification	1	l I Liquid	l Plas-
and soil name			l I Unified	I AASHTO	limit 	l ticity l index
	In.	·			Pct.	1
53:		1			1	
Aosquito		Peat	I PT	A-8	0-0	
	I.	ISilt loam, very fine sandy loam, stratified silt loam to I loamy fine sand IPermanently frozen material	ML 	A-4 	30-40 	INP-5
·						
iscum	0-3 3-11	IPeat IMuck	PT PT	A-8 A-8	0-0 0-0	NP NP
		Mucky silt loam	ML, OL	A-4, A-5	30-50	INP-10
		IStratified silt loam to loamy fine sand IGravelly sandy loam	ICL, CL-ML, ML SC-SM	A-4 A-4, A-2	0-30 0-15	INP-10
54:						
North Pole	0-2 2-4	Slightly decomposed plant material Highly decomposed plant material	I PT I PT	A-8 A-8	0-0 0-0	NP NP
	4-39	IStratified fine sand to silt loam	SM, ML	A-4	0-30	INP-10
	39-72 	IVery gravelly sand, extremely gravelly I sand, gravelly coarse sand	GP-GM 	A-1 	0-0 	NP
Noonku		I IModerately decomposed plant material	l I PT	 A-8	 0-0	 NP
	2-6 6-47	Silt loam		A-4	20-35 20-25	INP-10
		IStratified sand to fine sand to very fine sandy loam IGravelly sand, extremely gravelly sand, very gravelly sand	ML, SM GP-GM	A-3, A-4 A-1	0-0	INP-5
55:						
Peede	0-2 2-72	IModerately decomposed plant material ISilt loam	I PT I ML	A-8 A-4	0-0 20-35	NP NP-1(
56:						
Peede		IModerately decomposed plant material ISilt loam	I PT I ML	A-8 A-4	0-0 20-35	NP NP-1(
Mosquito		IPeat	I PT	A-8	0-0	I NP
	18-24 	ISilt loam, very fine sandy loam, stratified silt loam I to loamy fine sand	I ML	A-4 	30-40 	INP-5
	24-72 	IPermanently frozen material				
57: Piledriver	 0-3	I ISlightly decomposed plant material	I PT	 A-8	 0-0	I I NP
		Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	INP-5
		IStratified sand to fine sand to very fine sandy loam ISand, very gravelly sand	I SM, ML IGP-GM, SP-SM	A-4, A-3 A-1	20-25 0-0	INP-5
58:						
Piledriver		ISlightly decomposed plant material IStratified fine sand to silt loam, very fine sandy loam	PT ML	A-8 A-4	0-0 25-30	NP NP-5
	15-33	IStratified sand to fine sand to very fine sandy loam	SM, ML	A-4, A-3	20-25	INP-5
	33-72 	ISand, very gravelly sand I	IGP-GM, SP-SM	A-1 	0-0 	NP
Eielson		Slightly decomposed plant material	I PT	A-8	0-0	
		IVery fine sandy loam IStratified silt loam to fine sand	ML ML, SM	A-4 A-4	25-30 25-30	INP-5 INP-5
		Extremely gravelly sand, gravelly sand, very gravelly sand	I GP-GM	A-1 	0-0 	NP
59: Piledriver	 0-3	l ISlightly decomposed plant material	l I PT	 A-8	 0-0	i I NP
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	INP-5
		IStratified sand to fine sand to very fine sandy loam ISand, very gravelly sand	I SM, ML IGP-GM, SP-SM	A-4, A-3 A-1	20-25 0-0	NP-5 NP
ubar		I ISlightly decomposed plant material	l I PT	 A-8	 0-0	 NP
	2-10 10-72	Stratified fine sand to silt loam, very fine sandy loam ISand, extremely gravelly sand, fine sand, very gravelly	I ML I GP, GP-GM,	A-4 A-1	25-30 0-0	NP-5 NP
		I coarse sand	I SP, SP-SM	A-1 		
60: Pits, gravel	 		 	 		 _
			-		—- 	
61: Quarry pits		 		 		¦
Quarry pits	i i	 	i —	<u> </u>	 	i — I

Map symbol	l I Depth	I USDA texture	Classification		l I Liquid	 Plas-
and soil name		 	l Unified l		limit 	l ticity l index
	 In.	 	'		Pct.	. '
62:	1	1			Ì	i
liverwash		 				
63:	1	1			i	i
alchaket		Slightly decomposed plant material	I PT I	A-8	0-0	NP
		IVery fine sandy loam	I ML I		25-30	INP-5
		IStratified silt loam to fine sand IVery gravelly sand	ML, SM GP-GM, SP-SM		25-30 0-0	NP-5 NP
64:						1
alchaket		' ISlightly decomposed plant material	I PT I	A-8	0-0	I NP
		IVery fine sandy loam	I ML I		25-30	INP-5
		Stratified silt loam to fine sand	ML, SM		25-30	INP-5
	I	IVery gravelly sand	IGP-GM, SP-SM 	A-1	0-0 	NP
ypic Cryorthents		Stratified gravelly loamy sand to gravelly fine sandy	I GC-GM I	A-2	0-15	INP-5
		I loam to gravelly silt loam IStratified fine sand to silt loam	SC-SM, ML	A-4	 25-35	INP-10
		Very gravelly sand, extremely gravelly sand	ISP-SM, GP-GM		0-0	NP
55:		1				
aulich			i PT i	A-8	I 0-0	I NP
	16-21	ISilt loam, mucky silt loam	OL, ML	A-4	30-40	INP-10
	21-72 	IPermanently frozen material				
56:			i i		i .	i
aulich	0-16	Mucky peat, peat		A-8	0-0	
		ISilt loam, mucky silt loam IPermanently frozen material	OL, ML 	A-4	30-40 	INP-10
67:					1	1
Saulich	0-16	IMucky peat, peat	I PT I	A-8	0-0	I NP
		ISilt Ioam, mucky silt Ioam	I OL, ML I	A-4	30-40	INP-10
	21-72 	IPermanently frozen material				
8:				• •	İ	İ
aulich		ISIIt loam, mucky silt loam	PT OL, ML	A-8 A-4	0-0 30-40	NP NP-10
		Permanently frozen material		∧ - 1	<u> </u>	<u> </u>
1into	 0-5	ISlightly decomposed plant material	I I I	A-8	 0-0	 NP
		ISilt Ioam	i ML i		25-40	INP-10
		ISilt loam, silt	I ML I		15-25	INP-5
	16-72 	ISilt loam, silt	I ML I	A-4	15-25 	INP-5
69:		l I Muslaurat and				
aulich		IMucky peat, peat ISilt loam, mucky silt loam	PT OL, ML	A-8 A-4	0-0 30-40	NP NP-10
		Permanently frozen material		A-4	<u> </u>	<u> </u>
linto	 0-5	I ISlightly decomposed plant material	 PT	A-8	 0-0	 NP
		ISilt Ioam	I ML I	A-4	25-40	INP-10
		ISilt loam, silt	I ML I	A-4	15-25	INP-5
	16-72 	ISilt loam, silt	I ML I	A-4	15-25 	INP-5
70:						
teese		ISlightly decomposed plant material ISlit loam	I PT I	A-8	0-0	
		ISilt, silt loam	I ML I I ML I	A-4 A-4	25-35 25-35	INP-10
		Very channery silt loam, channery silt	I GM I	A-2, A-4	0-0	NP
	I	l loam, extremely channery silt loam			1	1
	1 33-72 	IWeathered bedrock				
71: teese		 Slightly decomposed plant material	 PT	۵.9		 NP
		ISlightly decomposed plant material ISilt loam	I PI I	A-8 A-4	0-0 25-35	INP-10
		ISilt, silt loam	I ML I	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt	I GM I	A-2, A-4	0-0	NP
		l loam, extremely channery silt loam			!	1
	33-72	Weathered bedrock	I		I	I

Map symbol	l I Depth	USDA texture	Classificati	on	 Liquid	 Plas-
and soil name			l I Unified	I AASHTO	limit 	l ticity l index
	! In.	، ۱ ۱	!	I	Pct.	- !
172:	i	I	i	i		i
Steese	0-2	Slightly decomposed plant material	I PT	A-8	0-0	NP
	2-5	ISilt loam	I ML	A-4	25-35	INP-10
	5-27	ISilt, silt loam	I ML	A-4	25-35	INP-10
	27-33	Very channery silt loam, channery silt	I GM	A-2, A-4	0-0	NP
	 33-72	I loam, extremely channery silt loam IWeathered bedrock			 	
170.	I				Ì	
173: Steese	0-2	ISlightly decomposed plant material	I PT	I A-8	 0-0	I I NP
	2-5	ISilt loam	ML	A-4	25-35	INP-10
	5-27	ISilt, silt loam	I ML	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt	I GM	A-2, A-4	0-0	NP
	 33-72	I loam, extremely channery silt loam IWeathered bedrock			 	
					i	i
174: Steese	 0-2	I ISlightly decomposed plant material	 PT	 A-8	 0-0	 NP
0.0000	2-5	ISilt loam	i ML	A-4	25-35	INP-10
		ISilt, silt Ioam	I ML	A-4	25-35	INP-10
		IVery channery silt loam, channery silt	GM	A-2, A-4	0-0	NP
	1	l loam, extremely channery silt loam	I	l ,	1	1
	33-72	IWeathered bedrock				
175:	I	1	1			1
Steese		Slightly decomposed plant material	I PT	I A-8	0-0	NP
	2-5	ISilt loam	I ML	A-4	25-35	INP-10
		ISilt, silt loam	ML	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt	I GM	A-2, A-4	0-0	NP
	 33-72	I loam, extremely channery silt loam IWeathered bedrock	1			
176:	1				1	
Steese	0-2	Slightly decomposed plant material	i PT	I A-8	, 0-0	I NP
	2-5	ISilt loam	I ML	A-4	25-35	INP-10
	5-27	ISilt, silt loam	I ML	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt	I GM	A-2, A-4	0-0	NP
		I loam, extremely channery silt loam IWeathered bedrock			1	
	1	I				—
Gilmore		Slightly decomposed plant material	I PT	I A-8		I —
	3-6	ISilt loam	I ML	A-4	30-40	INP-10
		ISilt loam, silt	ML	A-4	25-35	INP-10
		IVery channery silt loam, extremely channery silt loam IWeathered bedrock	I GM	A-2, A-4 	 	NP
177:	1	1			1	
Steese	0-2	Slightly decomposed plant material	I PT	і А-8	0-0	I NP
	2-5	ISilt loam	I ML	A-4	25-35	INP-10
		ISilt, silt Ioam	I ML	A-4	25-35	INP-10
	27-33	IVery channery silt loam, channery silt	GM	A-2, A-4	0-0	NP
	 33-72	I loam, extremely channery silt loam IWeathered bedrock	l		 	
Gilmore	 0-3	l ISlightly decomposed plant material	 PT	 A-8		
	3-6	Isilt loam	I ML	A-0	30-40	INP-10
		ISilt Ioam, silt		A-4	25-35	INP-10
		Very channery silt loam, extremely channery silt loam	I GM	A-2, A-4		NP
		IWeathered bedrock			i —-	<u> </u>
178:	i I	1				
Steese		Slightly decomposed plant material	I PT	A-8	0-0	NP
	2-5	ISilt loam	I ML	A-4	25-35	INP-10
	5-27	ISilt, silt loam	ML	A-4	25-35	INP-10
	27-33	Very channery silt loam, channery silt	GM	A-2, A-4	0-0	NP
	। 33-72	I loam, extremely channery silt loam IWeathered bedrock			 	
Cilmore	I	1			1	1
Gilmore		Slightly decomposed plant material		A-8	1	 INID 10
	3-6 6-12	ISilt loam ISilt loam, silt	I ML I ML	A-4 A-4	30-40 25-35	INP-10 INP-10
		Very channery silt loam, extremely channery silt loam	I GM			
	12-19	Ivery channery sill loam extremely channery sill loam		A-2, A-4		NP

Map symbol	l I Depth	I USDA texture	Classification	1	l Liquid	 Plas-
and soil name		 	l I Unified	I AASHTO	l limit l	ticity index
	In.	 	 	' 	Pct.	- '
179:	i	i	i	ĺ	i	i
Steese		ISlightly decomposed plant material	I PT	A-8	0-0	
	2-5 5-27	ISilt Ioam ISilt, silt Ioam	I ML I I ML I	A-4 A-4	25-35 25-35	INP-10 INP-10
		Very channery silt loam, channery silt	I GM	A-2, A-4	0-0	
	I I	l loam, extremely channery silt loam	I	, I	1	Ì
	33-72	Weathered bedrock				
Gilmore	0-3	Slightly decomposed plant material	I PT	A-8	i	i
	3-6	ISilt loam	ML	A-4	30-40	INP-10
		ISilt loam, silt	I ML	A-4	25-35	INP-10
		IVery channery silt loam, extremely channery silt loam IWeathered bedrock	I GM	A-2, A-4 	 	NP
80:	I	1				1
Fanacross	0-9	lPeat	I PT	A-8	0-0	I NP
		Mucky silt loam	ML, OL	A-4	30-40	INP-10
		IStratified fine sandy loam to silt loam IPermanently frozen material	I ML	A-4 	0-40 	INP-10
101.						1
81: Tanana	0-3	ISlightly decomposed plant material	I PT	 A-8	 0-0	I I NP
	3-6	ISilt loam, mucky silt loam	ML, OL	A-4	30-40	INP-10
		Very fine sandy loam, stratified silt loam to loamy fine sand	ML	A-4	30-40	INP-10
	25-72 	IPermanently frozen material	1	 	 	
82:		 				
Fanana	1 0-3 3-6	ISlightly decomposed plant material ISilt loam, mucky silt loam	PT ML, OL	A-8 A-4	0-0 30-40	NP NP-10
		Very fine sandy loam, stratified silt loam to loamy fine sand	,	A-4	30-40	INP-10
		Permanently frozen material	1		—	<u> </u>
Mosquito	 0-18	l IPeat	I PT	 A-8	 0-0	I I NP
	18-24	Silt loam, very fine sandy loam, stratified silt loam	ML	A-4	30-40	INP-5
	 24-72	I to loamy fine sand IPermanently frozen material	1		 	
					į	į
83: Typic Cryaquents	 0-6	IModerately decomposed plant material	l I PT	 A-8	 0-0	I I NP
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ISilt loam	I ML	A-4	25-40	INP-10
Histic Cryaquepts	 0-13	I IMucky peat, muck	I I PT	 A-8	 0-0	I I NP
· · · · / · · · · · · · · · ·	13-30	IVery fine sandy loam, silt loam	ML	A-4	25-35	INP-10
		Very fine sandy loam, silt loam	ML, SM	A-4	25-35	INP-10
Terric Cryofibrists	0-28	IPeat	I PT	I A-8	 0-0	NP
-	28-40		I PT	A-8	0-0	NP
	40-72 	ISilt loam, very fine sandy loam, silty clay loam	CL, ML	A-5 	30-45 	INP-30
84:	i	i	i		i	i
Typic Cryorthents		ISlightly decomposed plant material IStratified fine sand to silt loam	PT ML, SC-SM	A-8 A-4	0-0 25-35	NP NP-10
		IVery gravelly sand, extremely gravelly sand	GP-GM	A-4 A-1	0-0	NP
185:	I	1	 			1
	0-30	Stratified gravelly loamy sand to gravelly fine sandy	GC-GM	A-2	0-15	NP-5
		I loam to gravelly silt loam				
		IStratified fine sand to silt loam IVery gravelly sand, extremely gravelly sand	SC-SM, ML	A-4 A-1	25-35 0-0	INP-10
Urban land	I					1
	 	I				
186: Urban land	I	1				1
UIDall land	 	I				
87: Water	I	1	1		1	1
Water	 	 		 	—	
	i	I	I	I	i	i

Table 6. Engineering Sieve Data

(Absence of an entry indicates that the data were not estimated.)

Map symbol	l IDepth	USDA texture	Fragme			entage p ve numb	0		 Sand	l Silt	l Cla
and soil name		1	>10 inches 	3-10 inches 	 4	10	40	200	.! 	 	
	In.		Pct.	Pct.	! !	 	 	- ' 	Pct.	Pct.	Pct
)1:	i		Ì	i	i	i	i	i	i	i	i
olio		IPeat			<u> </u>	!		I	! <u></u>	!	
		Mucky peat Permanently frozen mucky peat	<u> </u>	<u> </u>	<u> </u>	 	 	 	 		
02:	1	1				1		1		1	
radway		Slightly decomposed plant material	<u> </u>		<u> </u>	<u> </u>					
	7-10 10-26	IMucky silt loam IStratified very fine sandy loam	0 0	0 0	100 95-100	100 95-100	95-100 85-95	175-90 140-65		150-85 110-50	
	I	I to fine sand Permanently frozen material									
	20-72					!			!	!	
)3: Chatanika	 0-4	I Slightly decomposed plant material	 	 	 	 	 	 	 	 	
hatarinta	4-6	Mucky silt loam	io	io	i 100	i 100	190-100	180-95	10-50	50-80	0-1
	6-21	ISilt loam	0	0	100	100	90-100	180-95	10-50	150-80	0-1
	21-72 	Permanently frozen material 	 	 	 	 	 	 	 	 	
04: Chatanika		I	 	 	 	 	 	 	 	 	
hatanika	14-6	Mucky silt loam	0	i o		, 100	, 90-100	180-95	10-50	, 150-80	0-1
	6-21	ISilt Ioam	0	0	100	100	190-100	180-95	10-50	150-80	0-1
	21-72 	Permanently frozen material	<u>—-</u> 	 	 	 	 	 	 	 	
05: Chatanika	 0-4	l ISlightly decomposed plant material		 	 	 	 	 	 	 	
india mina	14-6	Mucky silt loam	0	i o	•	, 100	, 90-100	' 180-95	, 10-50	, 150-80	0-1
	6-21	ISilt Ioam	0	0	100	100	190-100	180-95	10-50	150-80	0-1
	21-72 	Permanently frozen	<u>—-</u> 	 	 	 	 	 	 	— 	—
06:	1				1	1			1	1	
Chatanika		Slightly decomposed plant material	i —-	i	i —-	i —	i	I	i —-	i —-	i —-
	4-6	Mucky silt loam	0	0	100	100	90-100	180-95		150-80	
	6-21 21-72	Silt loam	0 	0 	100 	100 	90-100 	80-95 —-	<u> </u>	50-80 <u>—-</u>	
07:		1									
Chatanika		Slightly decomposed plant material	—-	—	I	I —	I —-	I —	I —		
	4-6	lMucky silt loam ISilt loam	0 0		100 100	100 100	90-100 90-100	180-95		150-80 150-80	
	6-21 21-72	Permanently frozen material	<u> </u>	I	<u> </u>		<u> </u>	180-95 	<u> </u>		—
Goldstream	 0-9	l IPeat, mucky peat	 	 	 	 	 	 	 	 	
	9-12	Mucky silt loam	10			100	195-100	175-90		150-80	
	12-20 20-72	Silt loam	0 	0 	100 	100 	95-100 	75-95 —-	10-45 <i></i>	50-80 	5-1 —-
08:											
Chena	0-4 4-9	Slightly decomposed plant material	<u> </u>	 0	 90-100		 70-00	 35-70	—- 45-90	<u> </u>	—
	I	I fine sandy loam, fine sand	I	1	1	I	1	I.	I	I.	I
	9-72 	Coarse sand, sand, very gravelly sand	0 	0 	45-95 	30-90 	15-65 	0-15 	85-100 	0-15 	0-5
)9: Jumps, landfill	 		 		 	 	 	 	 	 	
• •	i	 	1	1	Ì	Ì	Ì		Ì	Ì	Ì
10:)umps, mine	<u></u>		 					 			
11:				1	1	1		1	1	1	
ielson		Slightly decomposed plant material		i	i —	i			i	i	
	2-49 49-71	IVery fine sandy loam IStratified silt loam to fine sand	0 0	0 0	100 100	100 95-100	90-100	165-75		13-45 10-50	
		Extremely gravelly sand, gravelly sand,			150-80	195-100 130-80	185-95		145-80 186-100		
	1 1 1 2	I very gravelly sand					00	1010			

Map symbol	l IDepth	USDA texture	Fragme			entage pa ve numbe			l I Sand	l Silt	l I Clay
and soil name			>10 inches	3-10 linches	 4	10	40	200			
	I In.	- <u>-</u>	I Pct.	Pct.		- ! 	I	. ! 	I Pct.	Pct.	Pct.
	ļ		I	!	1	1	!	1	1	1	
12: Eielson	 0-2	I Slightly decomposed plant material	 		 	 	 	 	 	 	
	2-49	IVery fine sandy loam	0	0	100	100	90-100	165-75	150-77	13-45	5-10
	49-71	IStratified silt loam to fine sand	0	0	100	95-100	85-95	40-65	45-80	10-50	5-10
	71-72 	Extremely gravelly sand, gravelly sand, very gravelly sand	0	15-30 	50-80 	30-80 	20-30 	5-10 	86-100 	0-14 	0-5
Piledriver	0-3	I Slightly decomposed plant material	 	 	 	 	 	i	 	i	
	3-15 	Stratified fine sand to silt loam,	0 	i 0	i 100	100 	70-100 	40-95 	45-80 	10-50 	5-10
	15-33 	IStratified sand to fine sand to I very fine sandy loam	0 	0 	100 	100 	40-100 	5-55 	45-80 	10-50 	0-10
	33-72 	ISand, very gravelly sand	0 	0 	55-90 	25-85 	10-60 	0-20 	85-100 	0-15 	0-5
13: Eielson	 0-2	I Slightly decomposed plant material	 	 	 	 	 	 	 	 	
	2-49	IVery fine sandy loam	0	0	I 100	, 100	, 190-100	165-75	50-77	13-45	5-10
	49-71	Stratified silt loam to fine sand	0	0	100	195-100		140-65		10-50	
	71-72	Extremely gravelly sand, gravelly sand, very gravelly sand		15-30 	50-80 	30-80 	20-30 	5-10 	86-100 	0-14 	0-5
Tanana		ISlightly decomposed plant material					 		 	 	
	3-6 6-25	Silt loam, mucky silt loam	0 0	0 0	100 100	100 100	95-100 85-100	75-90 65-90		150-80	
	0-25	IVery fine sandy loam, stratified I silt loam to loamy fine sand	10		1 100	1 100		105-90	45-60 	10-50 	5-10
	25-72 	Permanently frozen material		i	i	i	i	i	i —	i	
114: Exter	 0-9	l IPeat	i	į	į	į	i	į	i	į	I
Ester		Permanently frozen mucky silt loam	0	0	1 100	100	<u></u> 90-100	170-90	111-45	150-80	5-10
		IPermanently frozen very	İÖ	35-45	40-65		15-55	110-50		150-80	
		I channery silt loam	1	1	1	1	!	1	!	!	
	21-72	Permanently frozen weathered bedrock									
115: Ester		l IPeat	1		1		1	1	1		
		Permanently frozen mucky silt loam	0	0	100	100	90-100	170-90	111-45	150-80	5-10
			0	35-45	40-65		15-55	10-50		150-80	
	 21-72	I channery silt loam Permanently frozen weathered bedrock	 	 	 	 	 	 	 	 	
116:				 							
Fairbanks		Slightly decomposed plant material	I <u> </u>	<u> </u>						<u> </u>	<u> </u>
	3-30 30-72	ISilt Ioam ISilt Ioam, silt	0 0		100 100	100 100	90-100 90-100	80-90 80-95		150-80 150-100	
117:	1	1		1		1					
Fairbanks	0-3	Slightly decomposed plant material	i —-	i —	i —	I —	i	i —	i —-	i —	I —-
	3-30	ISilt loam	0	0	100	100	90-100	180-90		150-80	
	130-72 	ISilt Ioam, silt	0 	0 	100 	100 	90-100 	80-95 	0-50 	50-100 	0-10
118: Fairt an les			1	1	1	1	!	1		1	
Fairbanks	0-3 3-30	ISlightly decomposed plant material	 0	 0	 100	<i></i> 100	—- 90-100	 80-90	 10-45	 50-80	 5_10
		ISilt Ioam, silt	0	10	100	1 100	190-100	180-90 180-95		150-80	
119:				ļ		ļ					
Fairbanks		Slightly decomposed plant material	I —-				<u> </u>	 190, 00	 10_45	<u> </u>	<u> </u>
	3-30 30-72	ISilt Ioam ISilt Ioam, silt	0 0		100 100	100 100	90-100 90-100	80-90 80-95		150-80	
120:				 		 					
Fairbanks		Slightly decomposed plant material	I <u> </u>	<u> </u>		<u> </u>			<u> </u>		<u> </u>
	3-30	ISilt loam			100	100	90-100	180-90		150-80	
	130-72	ISilt loam, silt	0	0	100	100	90-100	80-95 	0-50 	150-100) 0-10

	l IDepth	USDA texture	Fragme			entage pa ve numbe			 Sand	l Silt	l Clay
and soil name			>10 inches	l 3-10 linches	 4	10	40	200			
	' In. 	• 	Pct.	 Pct.	 	 	 	. ' 	l Pct.	Pct.	 Pct.
21: Tairbanka, atransky alamins		 	i	i	į	į	i	į	i	į	ļ
Fairbanks, strongly sloping	3-30	ISlightly decomposed plant material ISilt loam		0	100	100	<u> </u>	<u> </u>	10-45	<u></u> 50-80	<u>—-</u> 5-10
	30-72 	Silt loam, silt	0	0	100	100	90-100 	180-95	0-50	150-100) 0-1
airbanks, steep		Slightly decomposed plant material	i	i	i	i—-	i—-	i	i—-	i—-	i —-
	3-30 30-72	ISilt Ioam ISilt Ioam, silt	0 0	0 0	100 100	100 100	90-100 90-100	80-90 80-95		50-80 50-100	
22:	 		1								
airbanks		Slightly decomposed plant material				<u> </u>	<u> </u>	<u></u>	<u> </u>	<u> </u>	
	3-30 30-72	ISilt Ioam ISilt Ioam, silt			100 100	100 100	90-100 90-100	180-90 180-95		150-80 150-100	
Steese	 0-2	 Slightly decomposed plant material	 	 	 	 	 	 	 	 	
	2-5	ISilt Ioam	0	0		100	190-100	180-90		150-80	
	5-27 27-33	Silt, silt loam	0 0	0 0-40		100 15-55	90-100 15-55	80-90 10-50		150-100 150-80	
	I.	l loam, extremely channery silt loam									
		IWeathered bedrock				!		-			
23: ⁻ airbanks	 0-3	ISlightly decomposed plant material	 	 		 	 	 	 		
	3-30 30-72	ISilt Ioam ISilt Ioam, silt	0 0	0 0	100 100	100 100	90-100 90-100	80-90 80-95		150-80 150-100	
Steese	I	I					 				
	2-5	Slightly decomposed plant material		0	100	1 100	<u> </u>	<u></u> 80-90	<u> </u>	<u></u> 50-80	0-5
	5-27	ISilt, silt loam	0	0		100	190-100	180-90		150-100	
	I.	IVery channery silt loam, channery silt I loam, extremely channery silt loam		30-40 	40-65 	15-55 	15-55 	10-50 	15-50 	50-80 	0-5
	33-72 	Weathered bedrock	<u></u> 	<u>—-</u> 			<u></u> 		<u></u> 		—
24: ⁻ ubar	 0-2	 Slightly decomposed plant material	 	 	 	 	 	 	 	 	
	2-10 	Stratified fine sand to silt loam, very fine sandy loam	0 	0	95-100 	90-100 	50-100 	25-80 	45-75 	20-50 	5-10
	10-72 	ISand, extremely gravelly sand, fine I sand, very gravelly coarse sand	i o	i 0 I	48-90 	15-85 	15-35 	i 0-10	85-100 	0-15 	0-5
Piledriver	0-3	I ISlightly decomposed plant material	i 1	i I	i 1	i I	i I	i 1	i I	i 1	
	3-15	Stratified fine sand to silt loam,	0	0	100	100	70-100	40-95	45-80	10-50	5-10
	 15-33	l very fine sandy loam Stratified sand to fine sand to	 0	 0	 100	 100	 40-100	 5-55	। 45-80	 10-50	 0-10
	 33-72	l very fine sandy loam ISand, very gravelly sand	 0	 0	 55-90	 25-85	 10-60	 0-20	 85-100	 0-15	 0-5
25: Gilmore		ISlightly decomposed plant material	 		i	i		i			
	3-6 6-12	ISilt Ioam ISilt Ioam, silt	0 0	0 0	100 100	100 100	90-100 85-95	80-90 75-85		150-80 150-100	
	12-19	IVery channery silt loam,	0				115-55	10-50		150-100	
	 19-72	l extremely channery silt loam IWeathered bedrock				 	 		 		
			i	. <u> </u>		 			. <u> </u>		
26: Gilmore	 0-3	ISlightly decomposed plant material			<u> </u>			 		<u> </u>	
	3-6	ISilt Ioam	0	0	100	100	190-100	180-90		150-80	
	6-12 12-19	ISilt Ioam, silt IVery channery silt Ioam,	0 0	0 30-50	100 35-65	100 15-55	85-95 15-55	75-85 10-50		150-100 150-80	
	I	l extremely channery silt loam IWeathered bedrock	 								
					1	, 	, 	-			
27: Gilmore		ISlightly decomposed plant material	 		<u> </u>	 		 		¦	
	3-6	ISilt Ioam	0	0		100	190-100	180-90		150-80	
	6-12 12-19	ISilt loam, silt IVery channery silt loam,	0 0	0 30-50		100 15-55	85-95 15-55	75-85 10-50		150-100 150-80	
		l extremely channery silt loam									
	19-72	Weathered bedrock	1	I	I	I	I	I	I	I	i

Map symbol	l IDepth	I USDA texture	Fragme			entage p ve numb			l I Sand	 Silt	l Clay
and soil name			>10 inches	3-10 linches	 4	10	40	200			
	! In.		I Pct.	 Pct.	I	-	- ! 	-	 Pct.	 Pct.	I I Pct.
	Ì	l		1	Ì	Ì	Ì	Ì	I	I.	I
28:			1	1	1	1		1	1	1	1
Gilmore		Slightly decomposed plant material	<u> </u>	<u> </u>					<u> </u>		—
	3-6	ISilt loam	0 0		100 100	100	190-100	180-90		150-80	
	6-12 12-10	ISilt loam, silt IVery channery silt loam,		0 30-50	135-65	100 15-55	85-95 15-55	75-85 10-50		150-100 150-80	
		extremely channery silt loam	10	100-00	100-00	10-00	10-00	1	10-50	100-00	10-5
	19-72	Weathered bedrock	i	i	i	i	i	i —-	i —-	i —-	I —
29:			1								
29. Gilmore	0-3	ISlightly decomposed plant material		i		i —		i		i	i
	3-6	ISilt Ioam	0	0	100	100	190-100	180-90	15-50	150-80	0-5
	6-12	ISilt Ioam, silt	0	0	100	100	185-95	175-85	0-50	150-100	0 0-5
	12-19	, tory on an inory one rotani,	0	130-50	135-65	15-55	15-55	10-50	15-50	150-80	0-5
		extremely channery silt loam	1	1	1		1	1		1	l
	19-72	lWeathered bedrock							— 		
30:	i		i	i	i	i	i	i	İ	i	
Gilmore		Slightly decomposed plant material		I	I —	I —	I —-	I		I	I —
	3-6	ISilt loam	0	0	100	100	190-100	180-90		150-80	
	6-12 12-19	ISilt Ioam, silt IVery channery silt Ioam,	0 0	0 30-50	100 35-65	100 15-55	85-95 15-55	75-85 10-50		150-100 150-80	
	112-19	l extremely channery silt loam		130-50	133-05	10-00	10-00	10-50	10-50	150-60	10-5
	, 19-72	Weathered bedrock		i	i —-	i	i	i	i	i —-	
01.			1	1	1	1	1	1		1	
31: Gilmore	0-3	ISlightly decomposed plant material	i	i	i	i	i	i	 	i	
	3-6	ISilt loam	I 0	0	i 100	i 100	190-100	180-90	115-50	150-80	0-5
	6-12	ISilt Ioam, silt	0	0	100	100	185-95	175-85	0-50	150-100	0 0-5
	12-19	, , , ,	0	130-50	135-65	15-55	15-55	10-50	15-50	150-80	0-5
		l loam, extremely channery silt loam	1	1	1	1	1	1	1	1	
- - +		Weathered bedrock									
Ester	0-9 9-12	IPeat IPermanently frozen mucky silt loam			1 100	1 100	 90-100	—- 70-90	 11 / 15	<u></u> 50-80	 5.10
		Permanently frozen very	10	135-45	40-65	115-55	15-55	170-90		150-80	
		I channery silt loam							1		100
	21-72	IPermanently frozen weathered bedrock	I —	—	I —-	I —	! —-	—		I	
32:			1			1		1			
Gilmore	0-3	Slightly decomposed plant material	i	i—-	i	i	i	i	i —	i	
	3-6	ISilt Ioam	0	0	100	100	90-100	180-90	15-50	50-80	0-5
	6-12		0	0	100	100	185-95	175-85		150-100	
	12-19		10	130-50	135-65	15-55	15-55	10-50	115-50	150-80	0-5
	 19-72	l extremely channery silt loam Weathered bedrock	 		 	 	 	 	 	 	
				1		1	1	1		1	
Steese	0-2	Slightly decomposed plant material	I —-	I —	I —	I —	I	I —-	I —	I	I —
	2-5	ISilt loam	0	0	100	100	90-100	180-90		150-80	
	5-27		0	0	100	100	190-100	180-90		150-100	
	127-33	IVery channery silt loam, channery silt I loam, extremely channery silt loam	0	0-40	40-65 	15-55	15-55	10-50	115-50	150-80	10-5
	 33-72	Weathered bedrock		 			i	i			
00.	1		1	1	1	1	1	1	1	1	
33: Goldstream	 0-9	l IPeat, mucky peat		 	 	 		 	 	 	
	9-12	Mucky silt loam	0	0	100	100	95-100	175-90	10-45	150-80	5-10
	12-20	ISilt Ioam	0	0	100	1 100	195-100	175-95		150-80	
		Permanently frozen material	!	i —-	⁻	⁻	!	I—-	⁻		! —-`
34:			1	1		1	1			1	
34: Goldstream	0-9	l Peat, mucky peat	i	 			i	i	i	i	
	9-12	lMucky silt loam	i 0	i 0	i 100	i 100	95-100	75-90	10-45	150-80	5-10
	12-20	ISilt Ioam	0	0	100	100	195-100	175-95	10-45	150-80	5-10
		Permanently frozen material					I —				

Table 6. Engineering Sieve	Data—Continued
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Map symbol	l IDepth	USDA texture	Fragme			entage pa /e numbe			l I Sand	l Silt	l Clay
and soil name			>10 inches	3-10 linches	 4	10	40	200	 	 	
	In.	- <u></u> 	Pct.	Pct.	 	۱ ۱	I	i	Pct.	Pct.	Pct.
5:			1	1	1	1	1	1	1	1	
oldstream	İ 0-9	IPeat, mucky peat	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-
	9-12	Mucky silt loam	0				95-100	175-90		150-80	
	12-20	ISilt loam	0	0	100	100	95-100	175-95	10-45	150-80	5-1
	20-72 	Permanently frozen material	— 		— 	— 	 	1	— 	1	
istels	0-12	Peat	i	i	i —-	i —-	i —-	i	i —-	i —-	i —-
	12-17	Mucky peat	I —-	I —	I —	I —-	I —-	I —-	I —-	I —	I —
	117-26	Permanently frozen mucky peat									
	26-72 	Permanently frozen material	— 	—			—	1	—	—	
6:	i	1	i	i	i	i	i	i	i	i	i
istels	0-12	IPeat	I —	I —	I —	I —	I —	I —	I —	I —	I —-
	12-17	Mucky peat		!	!			!			!
	17-26	Permanently frozen mucky peat Permanently frozen material	—		—	—	—	—	—		
			, <u> </u>	i	,	i	, <u> </u>	1		i	
7:	Ì	I	I.	I	I	I	I	I	I.	I	I
arvis	0-3	Moderately decomposed plant material	I <u> </u>	<u> </u>			<u> </u>	<u> </u>		<u> </u>	<u> </u>
	3-6	IStratified fine sand to silt loam, I very fine sandy loam	0	0	100	100	150-100	0-100	145-80 1	10-50	15-10
	 6-24	Stratified sand to fine sand to	0		1 100	1 100	1 70-100	ı 5-75 ا	ا ا45-80	1 10-50	1 0-1
	1021	I very fine sandy loam		1							1
	24-72	IVery gravelly sand	0	0	135-90	130-80	10-60	0-20	185-100	0-15	0-5
0.	1		1	!	1	1	1	1	1	1	1
8: arvis	0-3	I IModerately decomposed plant material	 	i	 	 	 		 		
11113	3-6	IStratified fine sand to silt loam,	0	0	100	100	50-100	0-100	45-80	10-50	5-10
	I	l very fine sandy loam	l	I	I	I	I	1	1	I	l l
	6-24	Stratified sand to fine sand to	10	10	100	100	170-100	5-75	45-80	10-50	0-10
	104 70	l very fine sandy loam	 0		l 135-90	 30-80	 10-60		 85-100	10.15	
8:	24-72 	IVery gravelly sand			135-90	130-60	10-60	10-20		10-15	10-5
hena	İ 0-4	Slightly decomposed plant material	i —-	i	i —-	i —-	i —-	i —-	i —-	i —-	i —
	4-9	Stratified fine sand to silt loam,	0	0	90-100	90-100	170-90	35-70	45-90	10-50	0-5
		I fine sandy loam, fine sand									
	9-72	Coarse sand, sand, very gravelly sand	0	0	145-95 I	130-90 I	15-65 	10-15	185-100	10-15	10-5
39:	i		' 	i	Ì	i	i	i	' 	i	i
arvis	0-3	Moderately decomposed plant material	I —	I	I	I —	I —	I —-	I —	I —	I —
	3-6	Stratified fine sand to silt loam,	10	10	100	100	150-100	0-100	45-80	10-50	5-10
	 6-24	l very fine sandy loam IStratified sand to fine sand to	 0		 100	 100	 70-100	 5-75	145.90	 10-50	
	10-24	I very fine sandy loam		10	1 100	1 100	1/0-100	15-75		10-50	10-10
	24-72	IVery gravelly sand	i o	io	35-90	30-80	10-60	İ 0-20	185-100	0-15	0-5
	I	1	1	1	1	1	1	1	1	1	1
alchaket	0-3	Slightly decomposed plant material		<u> </u>		<u> </u>		<u> </u>	<u> </u>		
	3-24 24-45	IVery fine sandy loam IStratified silt loam to fine sand	0 0			100 95-100	190-100	65-75 40-65		10-50 10-50	
		IVery gravelly sand	0				120-30		85-100		
	Ì		Ì	Ì	l	I	1	1	I	Ì	I
0:			1	!	1	1	1	1	1	!	!
emeta	10-20	IPeat IPermanently frozen mucky peat	 			 			 		
			i	i	İ	i	i	i	i	i	i
1:	- I	1	I	I	I	I	I	I	I	I	I
scum		lPeat		I	I	I —	I —				! —
	3-11 11-15	Muck	 0	 0	<u> </u>	1	—- 95-100	—- 75-90	 10_45		1
		IMucky silt loam IStratified silt loam to loamy fine sand	10				195-100 180-100	175-90		150-80 110-50	
		IVery gravelly sandy loam	0				125-45	10-35		20-50	
	I	1	I	I	I	I	I	I.	I	I	I
oonku	0-2	Moderately decomposed plant material		•	•	•		<u> </u>		<u> </u>	<u> </u>
	2-6	ISilt loam					185-100	150-90		150-80	
	6-47 	IStratified sand to fine sand to I very fine sandy loam	0		100 	100 	0-100 	0-55 	140-80 	10-50 	10-10
	 47-72	Gravelly sand, extremely gravelly sand,	0	•	•	' 25-75	 0-45	0-20	' 85-100	0-15	0-3
	-	I very gravelly sand									

Map symbol	l IDepth	USDA texture	Fragm			entage p /e numb			 Sand	l Silt	l Cla
and soil name	ļ		>10 inches			10	40	200	1	1	
	I In.	_ I	Pct.	I I Pct.	 	. 	_ 	. I	I I Pct.	I I Pct.	I Pct
12:	I	1				1	1	I I	 	1	
linto		Slightly decomposed plant material	I —	I —	I —	I	I —	I —		I —	
	5-9	ISilt loam			100	100	190-100	185-100			0-1
	9-16	ISilt loam, silt			100	100	190-100	185-100			
	16-72 	ISilt Ioam, silt I	0 	0 	100 	100 	95-100 	85-100 	0-50 	150-100	0-1
13: 1into		 Clightly, decomposed plant material	1			1	1	1	1	1	!
///////	10-5 5-9	ISlightly decomposed plant material ISilt loam	0		100	100	<u> </u>	<u> </u>	1	1	0-1
	9-16	ISilt loam, silt			100	100	90-100	185-100			
		ISilt loam, silt			100	100	195-100	85-100			
14:			1			1		1		1	1
1into		ISlightly decomposed plant material		i	i —-	i —-	i —-	i —-	i —	i —-	i —-
	5-9	ISilt Ioam			100	100	90-100	185-100			0-1
	9-16	ISilt Ioam, silt			100	100	90-100	85-100			
	16-72 	ISilt Ioam, silt I	0	0 	100 	100 	95-100 	85-100 	0-50 	50-100 	0-1
15:	Ì		į	l	Ì	i	į	į	i –	į	i
linto		Slightly decomposed plant material		<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>	
	5-9	ISilt loam			100	100	90-100	85-100			0-1
	9-16 16-72	ISilt Ioam, silt ISilt Ioam, silt			100 100	100 100	90-100 95-100	85-100 85-100			
	I I	I	Ì								1
hatanika		Slightly decomposed plant material		<u> </u>	<u> </u>						
	4-6	Mucky silt loam			100	100	90-100		110-50		0-1
	6-21 21-72	ISilt loam IPermanently frozen material	0 	0 	100 	100 	90-100 	80-95 —-	10-50 <i></i> -	150-80 	0-1
10	I		1			1	1	1	!	1	!
16: 1into	0-5	I Slightly decomposed plant material	 	 	 		 		 	 	¦
	5-9	ISilt Ioam	0	0	100	100	190-100	85-100	10-50	50-80	0-1
	9-16	ISilt loam, silt			100	100	90-100	185-100			
	16-72	lSilt Ioam, silt I	0	0 	100 	100 	95-100 	85-100 	0-50 	150-100	0-1
hatanika	0-4	Slightly decomposed plant material	i —-	i —-	i —-	i—-	i —-	i —-	i —-	i —-	i —-
	4-6	Mucky silt loam			100	100	190-100		10-50		0-1
	6-21	ISilt loam	0 	0	100	100	90-100	80-95 	10-50	150-80	0-1
	21-72	Permanently frozen material				1		1			
17: 1into		l ISlightly decomposed plant material	 	 					1	1	1
	15-9	ISilt loam		•	100	100	90-100	185-100	10-50	150-80	0-1
	9-16	ISilt Ioam, silt	0		100	100	190-100	185-100			0-1
	16-72	ISilt loam, silt	10	10	100	100	195-100	185-100	0-50	150-100	0-1
hatanika	0-4	I Slightly decomposed plant material	¦	 	<u> </u>	i	 	i	i	i	¦
	4-6	Mucky silt loam	0	0	100	100	190-100	180-95	10-50	50-80	0-1
		ISilt loam	0 	0	100	100	90-100 	80-95 	10-50	150-80	0-1
		Permanently frozen material	1		— 	i	1	i —		;	i
18: 1into	 0-5	 Slightly decomposed plant material		 	 				 		
linto	15-9	ISilt loam	0	, 0	, 100	, 100	, 90-100	185-100	10-50	, 50-80	0-1
	9-16	lSilt loam, silt			100	100	90-100	85-100			
	16-72	ISilt Ioam, silt			100	100	195-100	185-100	0-50	150-100	10-1
hatanika	 0-4	l ISlightly decomposed plant material	¦	 	 		 		 	 	
	4-6	Mucky silt loam	•		100	100	90-100	180-95	10-50	150-80	0-1
	6-21	ISilt Ioam			100	100	90-100		10-50		0-1
		Permanently frozen material	<u> </u>	—-		!	I—-	!	[`]		! —
9:	I	1	1			1	Ì				
losquito		IPeat	I —	I <u> </u>	<u> </u>	<u> </u>	i	<u> </u>			i —-
	18-24	Silt loam, very fine sandy loam,	0	0	100	100	90-100	170-95	45-80	10-50	10-1
	 04 70	I stratified silt loam to loamy fine sand	1	I I	 	1	1	1	 _	I I	1
	124-12	Permanently frozen material	·	·	·	·	·	·	·	·	

Map symbol	l IDepth	USDA texture	Fragme	ents		entage p ve numb			 Sand	l Silt	∣ I Cla∖
and soil name	. ·		>10	3-10	Ī			1.000	.1	1	
			l inches	linches	4 	10 	40 	200 	 	I I	
50:	l In.		Pct.	Pct.	1		1	1	Pct.	Pct.	Pct.
losquito	- 0-18	l IPeat	 	i—-	i		i—-		i —-		
		Silt loam, very fine sandy loam,	i o	i 0	i 100	i 100	90-100	70-95	45-80	10-50	0-1
		I stratified silt loam to loamy fine sand	I.	ļ.	1	1	1	1	!	1	!
	124-72	Permanently frozen material	<u> </u>		<u> </u>	—	<u> </u>		<u> </u>	<u> </u>	—
oonku	-10-2	Moderately decomposed plant material	i	i—-	i—-	i	i—-	i	i—-	i—-	i —-
	2-6	ISilt loam	0	0	100	100	85-100	150-90		150-80	
	6-47	IStratified sand to fine sand to I very fine sandy loam	0	10	100	100	0-100	0-55	145-80	10-50	0-1
	' 47-72	Gravelly sand, extremely gravelly sand,	0	0	' 35-90	' 25-75	' 0-45	0-20	 85-100	0-15	, 0-3
	I.	I very gravelly sand	I	I.	I	1	I	I.	I		I
-4.	1		1	1				1	1		
51: loonku	-10-2	I Moderately decomposed plant material	i	i	i	i	i	i		i	
	2-6	ISilt Ioam	i o	io	i 100	i 100	85-100	150-90	14-47	50-80	3-1
	6-47	Stratified sand to fine sand to very fine	0	0	100	100	0-100	0-55	45-80	10-50	0-10
	 47-72	I sandy loam			l 35-90	l 25-75	 0-45		l 185-100		103
	4/-/2	IGravelly sand, extremely gravelly sand, I very gravelly sand		1			0-45 				
	I		1	1	1	1	1	1	1	1	1
52: Iorth Pole	1	l ISlightly decomposed plant material	1	 	1						1
	12-4	Highly decomposed plant material	i —	i	i —		i —-	i	i —-	i	i —-
	4-39	Stratified fine sand to silt loam	0	0	100	100	80-100	40-80		10-50	
	139-72		0	10	155-85	125-75	0-45	0-20	85-100	0-15	0-3
	1	l gravelly sand, gravelly coarse sand	1	1	1	1	1	1	1	1	1
53:	i	i I	i	i	i	i	i	i	i	i	i i
lorth Pole		Slightly decomposed plant material	! —-	!	! —-	! —	!	!	!	!	!
	2-4 4-39	Highly decomposed plant material Stratified fine sand to silt loam	 0	 0	<u> </u>	 100	 80-100	 40-80	<u> </u>	 10-50	1
	139-72		10	10	155-85	125-75	0-45		145-60		
	1	gravelly sand, gravelly coarse sand	1	Ì		1			1		I
A		 Dalat	1	1				1	1		1
losquito		IPeat ISilt Ioam, very fine sandy loam,		0	<u> </u>	1 100	<u></u> 90-100	—- 70-95	 45-80	<u> </u>	0-1
		I stratified silt loam to loamy fine sand		1							1
	24-72	Permanently frozen material	!	!	!	!	!	!	!	!	!
iscum	 - 0-3	l IPeat	1		1				1		1
	3-11	Muck	i —-	i	i —-	i —	i —-	i —	i —-	i	i —
		· · ·) · · · · ·	0		100	100	95-100	175-90		150-80	
	15-70		0	10	100	100	80-100	150-80		10-50	
	70-72 	lGravelly sandy loam I	0	0 	55-70 	50-65 	30-50 	10-50 	145-75 I	20-50 	10-5
54:	i	1	i	i	i	i	i	i	i	i	i
Iorth Pole		Slightly decomposed plant material	I —-	I	—	—	—	I	!—-	I	I
	2-4	Highly decomposed plant material Stratified fine sand to silt loam	 0	 0	<i></i> 100	 100	<u> </u>	1	<u> </u>	10.50	1
	4-39 39-72	IVery gravelly sand, extremely	10	10	155-85	125-75	0-45		45-80 85-100	10-50 0-15	
	1	gravelly sand, gravelly coarse sand		Ì							1
la a alus		 Mada anto ha da a sur a su da la star star da la	1	!	1	1	1	1	1		1
loonku	· 0-2 2-6	Moderately decomposed plant material	 0		<u> </u>	 100	—- 85-100	1 50-90	—- 14-47	 50-80	1 3-10
	6-47	Stratified sand to fine sand to	0	10	100	1 100	0-100			10-50	
		l very fine sandy loam									
	4/-72 	Gravelly sand, extremely gravelly sand, very gravelly sand	0	0	35-90 	25-75 	0-45 	10-20	85-100 	10-15	10-3 1
	i		i	i	i	i	i	i	i	í	i
55: _.			1	I.	1	1	I	1	I	1	
eede		Moderately decomposed plant material	 0	 0	 100	 100	—- 85-100	—-	 10_47		
	2-72 	ISilt Ioam I		1				70-90 		50-80 	
56:	Ì	Ì	Ì	Ì	Ì	Í	Ì	Í	Ì	Ì	Ì
eede		Moderately decomposed plant material			<u> </u>		<u> </u>	<u> </u>		<u> </u>	
	2-72 	ISilt Ioam	0	10	100 	100	85-100 	170-90	10-47	150-80	13-10 1
losquito	0-18	l IPeat		i —-	i	í	i	i	i	i	
	18-24	ISilt loam, very fine sandy loam,	0	i 0	i 100	i 100	90-100	170-95	45-80	10-50	0-1(
		I stratified silt loam to loamy fine sand	l	1	1		1		1	1	1
	124-72	Permanently frozen material			. —-	!			!		

Map symbol	l IDepth	I USDA texture	Fragme			entage pa /e numbe			 Sand	l I Silt	l I Clay
and soil name			>10 inches	3-10 linches	 4	10	40	200			
	 In.	 	 Pct.	 Pct.	 	 	 	-	I I Pct.	Pct.	I I Pct.
57:	1	1	I I				1				
Piledriver		Slightly decomposed plant material	<u> </u>	I —		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>
	3-15 	Stratified fine sand to silt loam, very fine sandy loam	0 	0 	100 	100 	70-100 	40-95 	45-80 	10-50 	5-10
	15-33	Stratified sand to fine sand to	0	0	100	100	40-100	5-55	45-80	10-50	0-10
	 33-72	l very fine sandy loam ISand, very gravelly sand	0	0	1 55-90	 25-85	1 10-60	0-20	85-100	0-15	 0-5
58:	1	1	1	1	1		1	1		1	
Piledriver	0-3	Slightly decomposed plant material		I —			<u> </u>			<u> </u>	<u> </u>
	3-15 	Stratified fine sand to silt loam, very fine sandy loam	0	0	100 	100 	70-100 	40-95 	145-80 I	10-50 	5-10
	15-33	IStratified sand to fine sand to	i o	i o	100	100	40-100	5-55	45-80	10-50	0-10
	 33-72	l very fine sandy loam ISand, very gravelly sand	 0		l 155-90	 25-85	 10-60	 0-20	 85-100	 0-15	 0-5
	I.		1	1							
Eielson	0-2 2-49	ISlightly decomposed plant material IVery fine sandy loam	 0	 0	 100	<i></i> 100	—- 90-100	 65-75	 50 77	—- 13-45	<u> </u>
	49-71	Stratified silt loam to fine sand	10	0		195-100			45-80		
	71-72 	Extremely gravelly sand, gravelly sand, very gravelly sand	0 	15-30 	50-80 	30-80 	20-30 	5-10 	86-100 	0-14 	0-5
59:	1		l I		1			1		1	
Piledriver		Slightly decomposed plant material	I	i	<u> </u>	I —	I	I	I	I	i —-
	3-15 	Stratified fine sand to silt loam, very fine sandy loam	0	0	100 	100 	70-100 	40-95 	45-80 	10-50 	5-10
	15-33	Stratified sand to fine sand to	0	10	100	100	40-100	5-55	45-80	10-50	0-10
	 33-72	l very fine sandy loam ISand, very gravelly sand	0	0	l 155-90	 25-85	 10-60	 0-20	 85-100	0-15	 0-5
Fubar	 0-2	I Slightly decomposed plant material	 	 		 	 	 	 	 	
	2-10	Stratified fine sand to silt loam,	0	0	95-100	90-100	50-100	125-80	45-75	20-50	5-10
	 10-72	l very fine sandy loam ISand, extremely gravelly sand, I fine sand, very gravelly coarse sand			 48-90 	 15-85	 15-35	 0-10	 85-100	 0-15	 0-5
	i		I		1		i	i		1	
60: Pits, gravel				 		 	 		 		1
r no, graver	i		i	i	i	i	i	i	i	i	i
61: Quarry pits				1	1		1			1	
Quarry pils		I	1								
162: Riverwash	1		1	1	1		1			1	
	1	 	1	— 			 				
63: Salahakat		 Clightly decomposed plant material	1	1	1		1	1		1	
Salchaket		Slightly decomposed plant material	0	0	100	100	<u> </u>	1 165-75	<u></u> 45-80	10-50	5-10
	24-45	Stratified silt loam to fine sand	10	0	100	195-100	185-95	40-65	45-80	10-50	5-10
	145-72 I	IVery gravelly sand	0	0	40-70 	30-55 	20-30 	5-10 	185-100	0-15 	0-5
64:	i .	i	į	i	i	i	i	į	i	i	į
Salchaket	0-3 3-24	ISlightly decomposed plant material IVery fine sandy loam	 0	 0	 100	<i></i> 100	<u> </u>	—- 65-75	 45-80	<u> </u>	 5-10
	24-45	Stratified silt loam to fine sand	10	10	100	95-100				110-50	
	45-72	Very gravelly sand	0	0	40-70	30-55 	120-30	5-10	85-100	0-15	0-5
Typic Cryorthents	0-30	I IStratified gravelly loamy sand to	0	0	l 65-80	ı 150-75	l30-65	1 10-55	। 47-77	ו 16-50	 3-7
	1	I gravelly fine sandy loam to	1			1	1		1	1	1
	1 30-63	I gravelly silt loam IStratified fine sand to silt loam	0	0	 100	 95-100	 75-95	 50-75	। 45-75	l 20-50	 1-5
	63-72 	IVery gravelly sand, extremely I gravelly sand	0 	0 			10-35 	0-10 	85-100 	0-15 	0-3
65:											
Saulich	0-16	Mucky peat, peat	I —-			<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
	16-21	ISilt loam, mucky silt loam IPermanently frozen material	0	0	100 	100 	90-100 	165-75	15-50	50-80 	0-5
			1	1		1	i				

Map symbol	l IDepth	USDA texture	Fragm			entage p /e numbe			 Sand	l I Silt	 Clay	
and soil name			>10 inches	3-10 inches	 4	10	40	200	 			
	 In.	 	Pct.	 Pct.	 	 	·	 	I I Pct.	Pct.	I I Pct.	
66:			į	į	i	į	į	i	i	į	į	
Saulich	10-16 16-21	lMucky peat, peat ISilt Ioam, mucky silt Ioam			<u> </u>	<u> </u>	—- 90-100	—- 65-75	— 15-50	—- 50-80	0-5	
	21-72 	Permanently frozen material	 	 	 	 	 	 	— 	 		
67: Saulich	 0-16	l IMucky peat, peat	 	 	 	 	 	 	 	 	 	
	16-21	ISilt loam, mucky silt loam	0	0	100	100	190-100	65-75	15-50	150-80	0-5	
	21-72 	Permanently frozen material		<u> </u>				 	 	<u> </u>		
68: Saulich	 0-16	l IMucky peat, peat	 	 	 	 	 	 	 	 	 	
	16-21 21-72	ISilt Ioam, mucky silt Ioam IPermanently frozen material		0	100	100 	90-100	65-75 	15-50	150-80	0-5	
	I		i	i					 			
/linto	0-5 5-9	Slightly decomposed plant material			 100	 100	—- 90-100	 85-100	 10-50	—- 50-80	 0-1(
	9-16	ISilt loam, silt	0	0	100	100	190-100	85-100	0-50	50-100	0-10	
	16-72 	Silt loam, silt	0 	0 	100 	100 	95-100 	185-100 	U-50 	50-100 	0-1 	
69: Saulich	 0-16	l IMucky peat, peat	 	 	 	 	 	 	 	 	 	
-	16-21	ISilt loam, mucky silt loam	0		100	100	90-100	l65-75	15-50	50-80	0-5	
	I.	Permanently frozen material 	i	i	<u></u> 	 		<u></u> 				
/linto	0-5 5-9	Slightly decomposed plant material	•	 0	 100	 100	 90-100	 85-100	 10-50	—- 50-80	<u></u> 0-1	
	9-16	ISilt loam, silt	0	0	100	100	190-100	185-100	0-50	150-100	0-1	
	16-72 	ISilt Ioam, silt	0 	0 	100 	100 	95-100 	85-100 	0-50 	50-100 	0-1) 	
70: Steese	 0-2	I	 	 	 	 	 	 	 	 	 	
	2-5	ISilt Ioam	i 0		100	100	90-100		15-50		0-5	
	5-27 27-33	ISilt, silt loam IVery channery silt loam, channery			100 40-65	100 15-55	90-100 15-55		0-50 15-50	50-100 50-80	0-5 0-5	
	I	I silt loam, extremely channery silt loam	1				1		1	I	1	
	33-72	IWeathered bedrock							 			
71: Steese	 0-2	I Slightly decomposed plant material	 	 	 	 	 	 	 	 	 	
	2-5	ISilt Ioam	0			i 100	190-100		15-50		0-5	
	5-27 27-33	ISilt, silt loam IVery channery silt loam, channery silt			100 40-65	100 15-55	90-100 15-55		0-50 15-50	50-100 50-80	10-5	
	 22 72	l loam, extremely channery silt loam IWeathered bedrock	1	1	1	1	1	1	1	1	1	
72: Steese	 0-2	I Slightly decomposed plant material						 	 	 	 	
	2-5 5-27	ISilt Ioam ISilt, silt Ioam			100 100	100 100	90-100 90-100		15-50 0-50	50-80 50-100	0-5	
		IVery channery silt loam, channery silt			40-65	115-55			15-50	150-100		
	 33-72	l loam, extremely channery silt loam lWeathered bedrock	 	 	 	 	 	 	 	 	 	
73:	I		1	1	1	1	1	1		1	1	
73. Steese		ISlightly decomposed plant material		i	i <u>—</u>	i —	i —	i —-		i —-	i	
	2-5 5-27	ISilt Ioam ISilt, silt Ioam			100 100	100 100	90-100 90-100		15-50 0-50	50-80 50-100	0-5 0-5	
		IVery channery silt loam, channery silt				115-55	115-55		15-50	150-80		
	 33-72	l loam, extremely channery silt loam IWeathered bedrock	 	 	 	 	 	 	 	 	 	
74:	I		1				1			1	1	
Steese		Slightly decomposed plant material			<u> </u>	<u> </u>		<u> </u>		<u> </u>		
	2-5 5-27	ISilt Ioam ISilt, silt Ioam			100 100	100 100	90-100 90-100		15-50 0-50	50-80 50-100	0-5 0-5	
	27-33	IVery channery silt loam, channery silt I loam, extremely channery silt loam	10	0-40	40-65	15-55	15-55	10-50	15-50	150-80	0-5	

Map symbol	l IDepth	USDA texture	Fragme			entage p ve numb			 Sand	l Silt	l Cla
and soil name		1	>10 inches	l 3-10 linches	 4	10	40	200	 	 	
	In.	 	Pct.	Pct.	 	. ! 	- ! 	- ! 	Pct.	Pct.	 Pct
75:	1	1	1	1	1	i		1	1	1	
Steese	0-2	Slightly decomposed plant material	I —	I —-	I —-	I	I —-	I —	I —	I —-	I —
	2-5	ISilt Ioam	0	0	100	100	90-100	180-90			0-5
	5-27	ISilt, silt loam	0	0	100	100	90-100			150-100	
	127-33	IVery channery silt loam, channery silt	10	0-40	140-65	15-55	15-55	10-50	15-50	150-80	0-5
	ا 133-72	l loam, extremely channery silt loam lWeathered bedrock	 	 	 	 	 	 	 	 	
76:	1		1	1	1	1	1	1		1	!
76. Steese	0-2	ISlightly decomposed plant material	i	i	i	i	i	i		i	¦
	2-5	ISilt loam	i o	I O	100	i 100	90-100	180-90	15-50	50-80	0-5
	5-27	ISilt, silt loam	0	0	100	100	90-100				0-5
	127-33	IVery channery silt loam, channery silt	0	0-40	40-65	15-55	15-55	10-50	15-50	150-80	10-5
	I	l loam, extremely channery silt loam	I	1	1	I	I	I.	I	I.	I I
	33-72	Weathered bedrock								!	
ailmore	0-3	ISlightly decomposed plant material		i		i	i	i	 	i	
	3-6	ISilt loam	0	0	100	100	90-100	180-90	15-50	50-80	0-5
	6-12	lSilt loam, silt	0	0	100	1 100	185-95			150-100	
		IVery channery silt loam,	0		135-65	15-55	15-55	10-50			0-5
	I.	l extremely channery silt loam	1	1	1	1	1	1	!	1	ļ –
	119-72	Weathered bedrock	 	— 		 	 	 	 	— 	—
77:		 	1	1	1	1	1	1		1	!
Steese	0-2 2-5	Slightly decomposed plant material		1			1	1	1	1	0-5
	12-5	ISilt Ioam ISilt, silt Ioam	10	0 0	100 100	100 100	90-100 90-100	180-90			10-5
		IVery channery silt loam, channery silt	10	0-40	140-65	115-55	15-55	100-50			10-5
		l loam, extremely channery silt loam									
	33-72	Weathered bedrock	!	!	!		!	!	! —	!	!—
Gilmore	 0-3	I Slightly decomposed plant material	 	 	 	 	 	 	 	 	
	3-6	ISilt loam	i o	i o	100	i 100	, 90-100	180-90	15-50	50-80	0-5
	6-12	lSilt loam, silt	0	0	100	100	185-95			150-100	
		IVery channery silt loam,	0		135-65	15-55	15-55	10-50			10-5
		l extremely channery silt loam	1	1	1	!	1	1	!	1	ļ
	19-72 	lWeathered bedrock	<u></u>		— 		<u> </u>		 	 	—
78:				1	Ì	Ì		Ì	l	Ì	į.
Steese		Slightly decomposed plant material					<u> </u>		1	—	
	2-5 5-27	ISilt Ioam ISilt, silt Ioam	0 0	0 0	100 100	100 100	90-100 90-100	180-90			10-5
		IVery channery silt loam, channery silt	10	0-40	40-65	115-55	190-100	100-90		150-100	10-5
		l loam, extremely channery silt loam	1								
	33-72	Weathered bedrock		!							
ailmore	0-3	ISlightly decomposed plant material	i	i	i	i	i	i		i	i
	3-6	ISilt loam	i 0	i o	i 100	i 100	90-100	180-90	115-50	50-80	0-5
	6-12	ISilt Ioam, silt	0	0	100	100	185-95	175-85	0-50	50-100	0-5
	12-19	IVery channery silt loam,	0	30-50	135-65	15-55	15-55	10-50	15-50	150-80	10-5
	 19-72	l extremely channery silt loam lWeathered bedrock	 		 	 	 	 	 	 	
				, <u> </u>			1				ĺ
79:	 0-2	 Slightly decomposed plant material	1	1		1					1
Steese	10-2 2-5	ISlightly decomposed plant material ISilt loam			 100	 100	 90-100	—- 80-90	1	150-90	10-
	2-5 5-27	ISilt oam	10	10	1 100	1 100	190-100 190-100			150-80	
		IVery channery silt loam, channery silt	10	0-40	140-65	115-55	15-55	100-50			10-5
		l loam, extremely channery silt loam	Ì								1
	33-72	IWeathered bedrock			!	<u> </u>		!			
ilmore	0-3	I ISlightly decomposed	<u> </u>		 		<u> </u>		 	 	
	Ì	plant material	I.	1	I.	I.	1	1	I	I.	I -
	3-6	ISilt loam	0	0	100	100	90-100	180-90			0-5
	6-12	ISilt loam, silt	0	0	100	100	185-95			150-100	
	12-19	IVery channery silt loam,	0	130-50	135-65	115-55	15-55	10-50	15-50	150-80	0-5
		l extremely channery silt loam	1	1		1	1		1	1	1
	119-72	Weathered bedrock	I	I	1	1	I	I	I	I	1

Map symbol	l I Depth	I USDA texture	Fragme	ents		entage pa /e numbe			l I Sand	l I Silt	 Clay
and soil name			>10 inches	3-10 linches	 4	10	40	200	. 		
	! In.	۱ ۱	I I Pct.	 Pct.	 	. ! 	 	 	 Pct.	 Pct.	I I Pct.
	1	1	I.	1	1	1	1	1	!	1	!
80: 'anacross	 0-9	l IPeat	 	 	 	 	 	 	 	 	
	9-11	Mucky silt loam	i o	i o	i 100	i 100	195-100	175-90	10-50	50-80	0-10
	11-17	Stratified fine sandy loam to silt loam	0	0	100	100	85-100	160-95 I	45-80 	10-50	0-10
	1/-/2				<u> </u>	— 	— 	— 			
81:			ļ.	1	!	!	I	I	1	1	1
anana		ISlightly decomposed plant material ISilt loam, mucky silt loam	<u> </u>		<u> </u>	1 100	—- 95-100	 75-90	—- 10-45	 50-80	 5-10
		IVery fine sandy loam, stratified	İÖ	0	100	100	85-100			10-50	
		I silt loam to loamy fine sand	1	1	1	1	1	1	1	1	1
	25-72 	Permanently frozen material		1	<u> </u>	1	 	 		— 	—
82:	Ì	i	Ì	Ì	1	Ì	Ì	Ì	1	Ì	Ì
Fanana	0-3 3-6	Slightly decomposed plant material Silt loam, mucky silt loam	 0	 0	 100	<u></u> 100	—- 95-100	 75-90	—- 10-45	 50-80	 5-10
		IVery fine sandy loam, stratified	10	0	100	100	185-100			10-50	
		I silt loam to loamy fine sand	1	1	1	1				1	
	25-72 	Permanently frozen material		1	— 	1	 	 	—	— 	—
Mosquito			i —	i	i —	i —-	i —	i —	i —-	i —-	i —-
	18-24	Silt loam, very fine sandy loam, stratified silt loam to loamy fine sand	0	0	100	100	190-100	170-95	45-80 	110-50	0-10
	 24-72	Permanently frozen material	i	i	i	i	i	i	i	i—-	i —
	I		!	1	1	1	1	1	1	1	1
83: Typic Cryaquents	0-6	I Moderately decomposed plant material	i	 		i	 	i —-	i	i—-	
, jp. e - j - q		ISilt loam	0	0	100	100	85-100	75-95	10-45	50-80	5-10
Histic Cryaquepts		l IMucky peat, muck	 	 	 	 	 	 	 	 	
		IVery fine sandy loam, silt loam	i o	i o	100	100	50-100	30-100	10-80	10-80	0-10
	30-72	IVery fine sandy loam, silt loam	10	0	100	100	150-100	25-100	10-80	10-80	0-10
Terric Cryofibrists	0-28	IPeat	i			i—-	i	i	i	i—-	
	28-40	IMuck	i —-	i	i —-	i —-	i —-	i —-	i —-	i —-	i —
	40-72	ISilt loam, very fine sandy loam, I silty clay loam	0	0	100	100	195-100	180-100	0-75	120-90	15-35
	i		i	i	i	i	i	i	i	i	i
84: Evening One worth a set		 	1	1	1	!	1	1	1	1	
Typic Cryorthents		ISlightly decomposed plant material IStratified fine sand to silt loam	 0			<u></u> 95-100	1 —- 185-95	—- 40-65	 45-75	<u></u> 20-50	1
		Very gravelly sand, extremely	10		40-65			0-10	185-100		
		l gravelly sand	1		1		1	1	1	1	1
85:	i	i	i	i	i	i	i	i	i	i	i
Typic Cryorthents, Fill		Stratified gravelly loamy sand	10	0	165-80	150-75	130-65	10-55	47-77	16-50	3-7
		I to gravelly fine sandy loam to gravelly silt loam	i	1	1	i	1	1	1	1	i İ
	130-63	Stratified fine sand to silt loam	0		100	195-100			45-75		
	163-72	Very gravelly sand, extremely gravelly sand	10	0	40-65 	20-50 	10-35	0-10	85-100	0-15 	0-3
	i		i	i	i	i	i	i	i	i	i
rban land		I —									
86:	1	1	Ì			i					
Jrban land	!	!	!	! —-	! —-	!			<u> </u>	!	1
87:	1	1	1	1	1	1		1	1	1	
Water		i	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i —-	i
	I	1	1	1	1	1	1	1	1	1	1

Table 7. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors—T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol	l I Depth	l I Moist	 Permeability	l I Available		 Organic	IErosio	on factor		l _l Wind	l I Wind
and soil name	 0-12 12-16 16-72 	bulk 0.05-0.10 0.07-0.18 			lextensi- 	matter 85-95 75-90 	 	 	 1 	erodibility 8 	erodibilit 0
102: Bradway	 0-7 7-10 10-26 26-72	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.23-0.25 0.15-0.18 		 85-95 8.0-12 0.0-3.0 	 .37 .32 	 .37 .32 	 2 	 8 	 0
103: Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
104: Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
105: Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
106: Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
107: Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
Goldstream	 0-9 9-12 12-20 20-72 	 0.05-0.10 1.00-1.20 1.00-1.20 	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 		85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	2 	 8 	 0
108: Chena	 0-4 4-9 9-72	 0.05-0.10 1.10-1.20 1.40-1.50	0.6-6	 0.05-0.35 0.16-0.18 0.03-0.05		 85-95 3.0-6.0 0.0-1.0	 .28 .10	 .32 .55	 1 	 2 	 134
109: Dumps, landfill		 	 		 	 	 	 	 - 	 	
110: Dumps, mine		, 	, 	 	 	 	 	 	 - 	 	,
111: Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134

Map symbol	l I Depth	l Moist	Permeability		I Linear lextensi- l bility	 Organic matter 	IErosion factors			l _l Wind	l I Wind
and soil name		l bulk I density	 	water capacity			 Kw 	 Kf	 T 	l erodibility group 	erodibility index
	' In.	l g/cc	I In/Hr	In/In	Pct.	 Pct.	 	- ' 	_ ' 	·	'
112: Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	2	 134
Piledriver	 0-3 3-15 15-33 33-72 	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70 	0.6-2 0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06 	0.0-2.9	85-95 3.0-6.0 1.0-5.0 0.0-1.0 	 .37 .32 .05 	 .37 .32 .28 	2 	2 	 134
113: Eielson	 0-2 2-49 49-71 71-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
Tanana	 0-3 3-6 6-25 25-72 	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.20-0.23 0.20-0.23 		 85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
114: Ester	 0-9 9-12 12-21 21-72		 6-20 0.000-0.001 0.000-0.001 0.000-0.001	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 	 8 	 0
115: Ester	 0-9 9-12 12-21 21-72		6-20 0.000-0.001 0.000-0.001 0.000-0.001	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 	 8 	 0
116: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
117: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
118: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22			 .37 .43	 .37 .43	 5 	 2 	 134
119: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	0.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
120: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
121: Fairbanks, strongly sloping	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22	0.0-2.9	 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
Fairbanks, steep	 0-3 3-30 30-72 	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	l l0.05-0.35 l0.20-0.22 l0.20-0.22	0.0-2.9		 .37 .43	 .37 .43 	 5 	 2 	 134

Map symbol	l I Depth	l I Moist	 Permeability 	 Available	 Linear extensi- bility	 Organic matter 	IErosi	on facto	rs	l I Wind I erodibility I group	 Wind erodibility index
and soil name		bulk density					 Kw	 Kf	 T		
	! In.	 g/cc	I I In/Hr	_ I In/In	I I Pct.	Pct.	. ! 	-!	! !		
122: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	 2 	 134
Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 		 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	2 	 134
123: Fairbanks	 0-3 3-30 30-72	 0.05-0.10 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22		 85-95 2.0-6.0 1.0-5.0	 .37 .43	 .37 .43	 5 	2	 134
Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9	85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	2 	2 	 134
124: Fubar	 0-2 2-10 10-72	 0.05-0.10 1.20-1.30 1.50-1.60	 6-20 0.6-2 6-20	 0.05-0.35 0.20-0.22 0.03-0.05		 85-95 2.0-4.0 0.0-1.0	 .32 .05	 .32 .28	 1 	 2 	 134
Piledriver	 0-3 3-15 15-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	 2 	 2 	 134
125: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
126: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
127: Gilmore	 0-3 3-6 6-12 12-19 19-72	0.05-0.10 11.10-1.20 11.10-1.20 11.40-1.50	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
128: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
129: Gilmore	 0-3 3-6 6-12 12-19 19-72 	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134

Table 7. Physical Properties of the Soils

Table 7. P	hysical	Properties	of the	Soils
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Map symbol	l I Depth	l I Moist	Permeability	l Available	 Linear	l I Organic	IErosio	on factor	s	l _l Wind	l I Wind
and soil name	name bulk density 		water capacity	lextensi- bility 	matter 	 Kw	 Kf 	 T 	erodibility group	erodibili index 	
	' In.	g/cc	 In/Hr	In/In	Pct.	Pct.	. '		_ ' 	- ' 	'
130: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 2-6	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
31: Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 2-6	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .15 	 .37 .43 .55 	 1 	 2 	 134
Ester	 0-9 9-12 12-21 21-72	1.40-1.50	 6-20 0.000-0.001 0.000-0.001 0.000-0.001	 0.05-0.35 	 	 85-95 7.0-12 1.0-5.0 	 	 	 1 	 8 	 0
132: Gilmore	0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 2-6	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	 6-20 0.6-2 0.6-2 2-6 	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	2 	 134
133: Goldstream	 0-9 9-12 12-20 20-72	 0.05-0.10 1.00-1.20 1.00-1.20 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.22 0.20-0.22 		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	
134: Goldstream	 0-9 9-12 12-20 20-72 	 0.05-0.10 1.00-1.20 1.00-1.20 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.20-0.22 0.20-0.22 		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	 0
135: Goldstream	 0-9 9-12 12-20 20-72	 0.05-0.10 1.00-1.20 1.00-1.20 	0.6-2	10.20-0.22 10.20-0.22		 85-95 4.0-8.0 2.0-5.0 	 .37 .55 	 .37 .55 	 2 	 8 	 0
Histels	 0-12 12-17 17-26 26-72 			 0.05-0.35 0.35-0.50 		 85-95 75-90 	 	 	1 1 	 8 	 0
136: Histels	 0-12 12-17 17-26 26-72			 0.05-0.35 0.35-0.50 		 85-95 75-90 	 	 	 1 	 8 	 0
137: Jarvis	 0-3 3-6 6-24 24-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.60-1.70	0.6-2 0.6-2	 0.05-0.35 0.19-0.22 0.15-0.18 0.03-0.06	0.0-2.9 0.0-2.9	1.0-5.0		 .37 .32 .28	 2 	 2 	 134

Map symbol	l I Depth	l I Moist	l Permeability	 Available Lii	 Linear	 Organic	IErosion factors			 _I Wind	l I Wind
and soil name		bulk density	 	water capacity	lextensi- bility	matter 	 Kw	 Kf	I I T	l erodibility group	erodibilit index
	' In.	_ I g/cc	I	In/In	 Pct.	Pct.	· '	_ ! 	! 	_ ' ' 	I
20.			1		1		1	1		1	1
38: Jarvis	0-3	0.05-0.10	 6-20	I 10.05-0.35		 85-95			12	2	 134
	3-6	1.10-1.20	0.6-2	10.19-0.22		3.0-6.0	.37	.37	I	I	I
	6-24	1.10-1.20	0.6-2	0.15-0.18		1.0-5.0	1.32	1.32	I	1	l
	24-72 	1.60-1.70 	6-20 	10.03-0.06	0.0-2.9	0.0-1.0 	.05 	.28 			
Chena	0-4	10.05-0.10	I 6-20	10.05-0.35	i	85-95			i1	2	134
	4-9	1.10-1.20		0.16-0.18		3.0-6.0	1.28	1.32	1	1	l
	9-72	1.40-1.50	6-20 	0.03-0.05	10.0-2.9	0.0-1.0 	1.10	.55 			1
39:	i	i	i	i	i	i	i	i	i	i	i
arvis	0-3	10.05-0.10	6-20	10.05-0.35		85-95			12	2	134
	3-6	1.10-1.20	0.6-2	0.19-0.22		3.0-6.0	.37	1.37			1
	6-24 24-72	1.10-1.20 1.60-1.70	0.6-2 6-20	10.15-0.18 10.03-0.06		1.0-5.0 0.0-1.0	.32 .05	.32 .28	ì	1	1
	I	I.	I	1	I	1	1	I	Ì	Ì	l
Salchaket	0-3	10.05-0.10		10.05-0.35		85-95			15	2	134
	3-24 24-45	1.10-1.20 1.10-1.20	0.6-2 0.6-2	0.20-0.22		3.0-6.0 1.0-5.0	.37 .43	.37 .43			1
	45-72	1.50-1.60		10.20-0.22		0.0-1.0	1.45	1.28	i	i	İ
	I	1	I	1	I	1	1	1	1	1	I
40:			 6-20			 85-95	 		 1	 8	 0
emeta	0-20 20-72	0.05-0.10 	0.000-0.001	0.05-0.35 		00-95			1	0	
	I	i	1	i	i	i	i	i	i	i	i
41: .iscum	 0-3		 6-20			 85-95	 	 	 5	 8	 0
ISCUIT	3-11	10.05-0.10	0.001-0.06	10.05-0.35 10.25-0.30		60-85			15		1
	11-15	1.00-1.20		10.20-0.22		4.0-8.0	1.37	1.37	i	i	İ
	15-70	1.20-1.60		10.15-0.22		1.0-5.0	1.43	1.43	I	I	l
	70-72	1.30-1.50	2-6 	0.10-0.14	0.0-2.9	1.0-3.0 	.20	.37 			
Noonku	0-2	10.07-0.18	0.6-2	10.35-0.50		75-90			3	2	134
	2-6	1.10-1.20	0.6-2	10.20-0.25		2.0-6.0	1.37	1.37	1	1	1
	6-47 47-72	1.10-1.20 1.40-1.70	0.6-2 6-20	0.15-0.18 0.03-0.04		1.0-5.0 0 0-1 0	.32 .05	.32 .28			1
			1					1	i	i	i
42:					1					 2	
<i>M</i> into	0-5 5-9	0.05-0.10 1.10-1.20		10.05-0.35 10.20-0.24		85-95 2.0-8.0	 .37	 .37	15	12	134
	9-16	1.10-1.20		0.21-0.23		1.0-5.0	1.43	1.43	i	i	i
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	1.43	.43	1	1	l.
43:	1		1		1		1		1		1
Vinto	0-5	10.05-0.10	6-20	10.05-0.35	i	85-95		i	15	2	134
	5-9	1.10-1.20		10.20-0.24		2.0-8.0	1.37	1.37	I	1	l
	9-16 16-72	11.10-1.20		0.21-0.23 0.21-0.23			.43 .43	1.43			1
		1.10-1.20 	0.6-2 					.43 	i	i	i İ
44:	1		!	1	1		1	1	1	1	
vlinto	0-5	10.05-0.10		0.05-0.35		85-95			15	2	134
	5-9 9-16	1.10-1.20 1.10-1.20		10.20-0.24 10.21-0.23		2.0-8.0 10-50	.37 .43	.37 .43	Ì	1	1
	16-72	1.10-1.20		0.21-0.23			1.43	1.43	i	i	i
45:					1		1	1			
45: Ainto	0-5	1 0.05-0.10	 6-20	l0.05-0.35		 85-95			15	12	 134
-	5-9	1.10-1.20		0.20-0.24		2.0-8.0	.37	.37	Ī	i T	
	9-16	1.10-1.20		0.21-0.23			1.43	.43	!	1	l .
	16-72 	1.10-1.20 	0.6-2 	0.21-0.23	0.0-2.9 	1.0-5.0 	.43 	.43 			
Chatanika	0-4	0.05-0.10	6-20	1 0.05-0.35		 85-95			4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37	I	1	I
	6-21	1.00-1.30		0.21-0.23		1.0-5.0	1.43	.43		1	l
	21-72		0.000-0.001						1	1	1

Table 7. Physical Properties of the Soils

Table 7. P	hysical	Properties	of the S	Soils
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Map symbol	l I Depth	l I Moist	 Permeability	l I Available	 Linear	l I Organic	Erosio	on facto	rs	l I Wind	l I Wind
and soil name		bulk density		l water		matter	l Kw	 Kf	 T	l erodibility	
	! In.	_ I g/cc	I	In/In	 Pct.	 Pct.	I	- ! 	 	- ' 	I
146: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	 6-20 0.6-2 0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	 2 	 134
147: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
Chatanika	0-4 4-6 6-21 21-72 	 0.05-0.10 1.00-1.30 1.00-1.30 	0.6-2	 0.05-0.35 0.21-0.23 0.21-0.23 		85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	4 	2 	134
148: Minto	 0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	 5 	 2 	 134
Chatanika	 0-4 4-6 6-21 21-72	 0.05-0.10 1.00-1.30 1.00-1.30 	 6-20 0.6-2 0.6-2 0.000-0.001	 0.05-0.35 0.21-0.23 0.21-0.23 		 85-95 7.0-12 1.0-5.0 	 .37 .43 	 .37 .43 	 4 	2 	 134
149: Mosquito	 0-18 18-24 24-72 	 0.05-0.10 0.80-1.40 	 6-20 0.6-2 0.000-0.001 	 0.05-0.35 0.24-0.28 	 0.0-2.9 	 85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
150: Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.24-0.28 	 0.0-2.9 	 85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
Noonku	0-2 2-6 6-47 47-72	0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70		 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04	0.0-2.9	75-90 2.0-6.0 1.0-5.0 0.0-1.0	 .37 .32 .05	 .37 .32 .28	3 	2 	134
151: Noonku	 0-2 2-6 6-47 47-72	 0.07-0.18 1.10-1.20 1.10-1.20 1.40-1.70	0.6-2 0.6-2	 0.35-0.50 0.20-0.25 0.15-0.18 0.03-0.04 	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .32 .05	 .37 .32 .28	 3 	 2 	 134
152: North Pole	 0-2 2-4 4-39 39-72	 0.05-0.10 0.20-0.30 1.20-1.60 1.40-1.70	0.001-0.06 0.6-2	 0.05-0.35 0.25-0.30 0.15-0.22 0.03-0.05	 0.0-2.9		 .43 .05	 .43 .28	 2 	 2 	 134

Map symbol	l I Depth	l I Moist	 Permeability	 Available		 Organic	IErosio	on facto	rs	l _l Wind	l I Wind
and soil name		l bulk I density	 	water capacity	lextensi- l bility	matter 	 Kw	 Kf	I I T	l erodibility group	erodibilit index
	' In.	 g/cc	In/Hr	In/In	Pct.	 Pct.		- ' 	' 	- '' 	'
153: North Pole	 0-2		 6-20		, 	 95.05	 	 	 2	 2	 134
North Fole	2-4	10.05-0.10 10.20-0.30	0.001-0.06	10.05-0.35 10.25-0.30		85-95 60-85			2	2	134
	4-39	1.20-1.60	0.6-2	0.15-0.22		1.0-5.0	1.43	1.43	1	1	l
	39-72 	1.40-1.70 	6-20 	0.03-0.05 	0.0-2.9 	0.0-1.0 	.05 	.28 			
Mosquito	0-18	0.05-0.10		10.05-0.35	i	85-95			11	8	0
	18-24 24-72	0.80-1.40 	0.6-2 0.000-0.001	0.24-0.28 	0.0-2.9 	5.0-20 	.37 	.37 	I	1	
Liscum	 0-3	 0.05-0.10	 6-20	 0.05-0.35		 85-95	 	 	 5	 8	 0
2.0004111	3-11		0.001-0.06	0.25-0.30		60-85			I		
	11-15	1.00-1.20	0.6-2	0.20-0.22		4.0-8.0	.37	1.37	1		
	15-70 70-72	1.20-1.60 1.30-1.50	0.6-2 2-6	10.15-0.22 10.10-0.14		1.0-5.0 1.0-3.0	.43 .20	.43 .37	I		
154:	1	1		1		1	1	1	1	1	
North Pole	0-2	10.05-0.10		0.05-0.35	i	85-95			2	2	134
	2-4 4-39	10.20-0.30	0.001-0.06 0.6-2	10.25-0.30 10.15-0.22	 00-29	60-85 1.0-5.0	 .43	 .43			1
	39-72	1.40-1.70		0.03-0.05		0.0-1.0	1.05	1.28	į	į	i
Noonku	 0-2	ı 10.07-0.18	0.6-2	ı 10.35-0.50		 75-90	 	 	 3	2	 134
	2-6	11.10-1.20	0.6-2 0.6-2	10.20-0.25		2.0-6.0	.37 .32	.37 .32			
	6-47 47-72	1.10-1.20 1.40-1.70	6-20	10.13-0.18		1.0-5.0 0.0-1.0	1.05	1.32	į		
155:	I	I I		1		1	1	1	I		
Peede	0-2 2-72	0.07-0.18 1.10-1.20	0.6-2 0.6-2	10.35-0.50 10.20-0.25		75-90 1.0-5.0	 .37	 .37	3 	2	134
156:		1	1	1		1	1	1	I	1	
Peede	0-2	0.07-0.18	0.6-2			75-90			3	2	134
	2-72 	1.10-1.20 	0.6-2 	10.20-0.25 1	0.0-2.9 	1.0-5.0 	.37 	.37 	I	1	
Mosquito	0-18	0.05-0.10	6-20			85-95			1	8	0
	18-24 24-72	0.80-1.40 	0.6-2 0.000-0.001	0.24-0.28 	0.0-2.9 	5.0-20 	.37 	.37 	I		1
157:				1		1					
Piledriver	0-3	0.05-0.10	6-20	10.05-0.35		85-95			12	2	134
	3-15 15-33	1.10-1.20 1.10-1.20	0.6-2 0.6-2	10.19-0.22 10.15-0.18		3.0-6.0 1.0-5.0	.37 .32	.37 .32			
	33-72	1.60-1.70	6-20	0.03-0.06		0.0-1.0	1.05	1.28	į	i	i
158:	I	I I		1		1	1	 	I I	1	
Piledriver	0-3 3-15	0.05-0.10 1.10-1.20	6-20 0.6-2	10.05-0.35 10.19-0.22		85-95	 .37	 .37	2	2	134
	15-33	11.10-1.20		10.19-0.22		1.0-5.0	1.32	1.37			1
	33-72	1.60-1.70		10.03-0.06	0.0-2.9	0.0-1.0	.05	.28	I	1	
Eielson	0-2	0.05-0.10		10.05-0.35		85-95			5	2	134
	2-49 49-71	1.10-1.20 1.10-1.20		10.20-0.22		3.0-6.0 1.0-5.0	.37 .43	.37 .43			
	71-72	1.50-1.60		10.02-0.04			1.05	1.28	i		
159:			1	1					I	1	
Piledriver	0-3	0.05-0.10		10.05-0.35 10.19-0.22		85-95	 27	 27	2	2	134
	3-15 15-33	1.10-1.20 1.10-1.20		10.19-0.22		3.0-6.0 1.0-5.0	.37 .32	.37 .32			1
	33-72	1.60-1.70		10.03-0.06			1.05	1.28	i	Ì	Ì
Fubar	0-2	10.05-0.10		10.05-0.35		 85-95			1	2	134
	2-10 10-72	1.20-1.30 1.50-1.60		10.20-0.22 10.03-0.05		2.0-4.0 0.0-1.0	.32 .05	.32 .28	I I	1	
160:									i	Ì	1
Pits, gravel			 						-		

Table 7. Physical Properties of the Soils

Table 7. Physical Properties of the Soils

Map symbol	l I Depth	l I Moist	 Permeability	 Available	 Linear	l I Organic	IErosio	on facto	rs	l _l Wind	l I Wind
and soil name		l bulk I density		water capacity 	lextensi- l bility	matter 	 Kw	 Kf 	 T	l erodibility l group	erodibili index
	' In.	 g/cc	I In/Hr	In/In	Pct.	 Pct.	. ' 	- ' 	- ' 	- ' 	'
61: Pits, quarry	 	i i	 	 	 	 	 	i 	 -	 	
62: Riverwash	 	i 	 	i 	 	 	i 	i 	i -	 	
163: Salchaket	 0-3 3-24 24-45 45-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	 6-20 0.6-2 0.6-2 6-20	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
l64: Salchaket	 0-3 3-24 24-45 45-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.50-1.60	 6-20 0.6-2 0.6-2 6-20	 0.05-0.35 0.20-0.22 0.20-0.22 0.02-0.04	0.0-2.9	 85-95 3.0-6.0 1.0-5.0 0.0-1.0	 .37 .43 .05	 .37 .43 .28	 5 	 2 	 134
Typic Cryorthents	 0-30 30-63 63-72 	 1.30-1.60 1.10-1.30 1.30-1.50 	6-20	 0.12-0.15 0.06-0.22 0.05-0.06	0.0-2.9	 3.0-10 0.0-1.0 0.0-1.0	 .24 .05 .05	 .37 .28 .28	2 	 2 	 134
165: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	8 	0
166: Saulich	 0-16 16-21 21-72 	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	0
167: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	0
168: Saulich	0-16 16-21 21-72	 0.05-0.10 1.10-1.20 	 6-20 0.6-2 0.000-0.001	 0.05-0.35 0.23-0.25 	 0.0-2.9 	 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
Minto	0-5 5-9 9-16 16-72	0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9	85-95 2.0-8.0 1.0-5.0 1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2 	134
169: Saulich	 0-16 16-21 21-72	 0.05-0.10 1.10-1.20	 6-20	 0.05-0.35 0.23-0.25 		 85-95 2.0-10 	 .37 	 .37 	 2 	 8 	 0
Minto	0-5 5-9 9-16 16-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.10-1.20	0.6-2 0.6-2	 0.05-0.35 0.20-0.24 0.21-0.23 0.21-0.23	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .43	 .37 .43 .43	5 	2	134
170: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
171: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10	0.0-2.9 0.0-2.9	1.0-5.0	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134

Map symbol	l I Depth	l I Moist	 Permeability	 Available		 Organic	IErosio	on facto	rs	l I Wind	l I Wind
and soil name		bulk density	 	water capacity	lextensi- bility	matter 	 Kw	 Kf	I I T	l erodibility group	erodibility index
	' In.	 g/cc	In/Hr	In/In	Pct.	Pct.		- ' 	_ ' 	- ' 	'
172: Steese	 0-2 2-5 5-27 27-33 33-72	0.05-0.10 11.10-1.20 11.10-1.20 11.40-1.50	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	2 	 134
173: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
174: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
175: Steese	 0-2 2-5 5-27 27-33 33-72	0.05-0.10 11.10-1.20 11.10-1.20 11.40-1.50	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
176: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
177: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9		 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	2.0-8.0 1.0-5.0	 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134
178: Steese	 0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9		 .37 .43 .15 	 .37 .43 .55 	 2 	 2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72 	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9		 .37 .43 .10 	 .37 .43 .43 	 1 	 2 	 134

Table 7. Physical Properties of the Soils

Table 7.	Physical	Properties	of t	the Soils
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Map symbol	l I Depth	l I Moist	 Permeability	l I Available	 Linear	 Organic	IErosio	on facto	ſS	l I Wind	 Wind
and soil name		l bulk I density		water capacity	lextensi- bility	matter 	 Kw	 Kf	 T	l erodibility I group	erodibilit
	 In.	 g/cc	I I In/Hr	 In/In	 Pct.	 Pct.	 	- ' 	_ ! 	_ ! !	۱
179: Steese	0-2 2-5 5-27 27-33 33-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9	 85-95 2.0-6.0 1.0-5.0 0.0-3.0 	 .37 .43 .15 	 .37 .43 .55 	 2 	2 	 134
Gilmore	 0-3 3-6 6-12 12-19 19-72	 0.05-0.10 1.10-1.20 1.10-1.20 1.40-1.50 	0.6-2 0.6-2	 0.05-0.35 0.20-0.22 0.20-0.22 0.05-0.10 	0.0-2.9 0.0-2.9	 85-95 2.0-8.0 1.0-5.0 1.0-5.0 	 .37 .43 .10 	 .37 .43 .43 	 1 	2 	 134
180: Tanacross	 0-9 9-11 11-17 17-72	 0.05-0.10 0.80-1.20 1.20-1.40 	 6-20 0.6-2 0.6-6 0.000-0.001	 0.05-0.35 0.20-0.22 0.17-0.22 	0.0-2.9	 85-95 5.0-10 0.0-1.0 	 .37 .43 	 .37 .43 	1 	 8 	 0
181: Tanana	 0-3 3-6 6-25 25-72	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.20-0.23 0.20-0.23 	0.0-2.9	 85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
182: Tanana	 0-3 3-6 6-25 25-72	 0.05-0.10 1.10-1.20 1.10-1.20 	0.6-2	 0.05-0.35 0.20-0.23 0.20-0.23 	0.0-2.9	 85-95 2.0-6.0 0.0-2.0 	 .37 .43 	 .37 .43 	 2 	 8 	 0
Mosquito	 0-18 18-24 24-72	 0.05-0.10 0.80-1.40 		 0.05-0.35 0.24-0.28 	 0.0-2.9 	 85-95 5.0-20 	 .37 	 .37 	 1 	 8 	 0
183: Typic Cryaquents	 0-6 6-72	 0.07-0.18 1.10-1.30		 0.35-0.50 0.20-0.22		 75-90 1.0-5.0	 .37	 .37	 5 	 8 	 0
Histic Cryaquepts	0-13 13-30 30-72	0.05-0.10 1.10-1.30 1.20-1.40	0.6-2	0.05-0.35 0.21-0.23 0.18-0.23	0.0-2.9	85-95 3.0-7.0 1.0-5.0	 .37 .43	 .37 .43	5 	8 	0
Terric Cryofibrists	0-28 28-40 40-72	0.05-0.10 0.20-0.30 1.30-1.45	0.001-0.06	 0.05-0.35 0.40-0.55 0.20-0.27		85-95 60-85 5.0-10	 .37	 .37	1 	8 	0
184: Typic Cryorthents	 0-1 1-49 49-72	 0.05-0.10 1.10-1.30 1.30-1.50	0.6-2	 0.05-0.35 0.20-0.22 0.05-0.06	0.0-2.9	 85-95 1.0-3.0 0.0-1.0	 .32 .05	 .32 .28	 3 	 2 	 134
185: Typic Cryorthents, fill	 0-30 30-63 63-72	 1.30-1.60 1.10-1.30 1.30-1.50	6-20	 0.12-0.15 0.06-0.22 0.05-0.06	0.0-2.9	 3.0-10 0.0-1.0 0.0-1.0	 .24 .05 .05	 .37 .28 .28	 2 	 2 	 134
Urban land			 				 	 	-	 	
186: Urban land	 	 	 	 	 	 	 	 	 -		
187: Water	 	 	 	 	 	 	 	, 	 -	 	

Table 8. Chemical Properties of the Soils

Map symbol and soil name	Depth 	 Cation exchange capacity 	 cation exchange 	 Soil reaction
	l I In.	 meq/100 g	_l	l I pH
101: Bolio	 0-12 12-16 16-72	 	120-210 	 3.6-5.5 3.6-6.0 3.6-6.0
102: Bradway	7-10 10-26 26-72	 115-155 15-30 1-10 	 	 5.6-6.5 5.6-6.5 7.4-7.8
103: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
104: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	 115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
105: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
106: Chatanika	 0-4 4-6 6-21 21-72	 5-15 	15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
107: Chatanika	4-6 6-21 21-72	 5-15 	15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
Goldstream	 0-9 9-12 12-20 20-72 	 	70-120 15-30 5-15 	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
108: Chena	 0-4 4-9 9-72	 115-155 5-20 1-5 	I —-	 5.1-6.0 5.6-6.5 5.6-6.5
109: Dumps, landfill	i	i —	i i	i
110: Dumps, mine	 	¦ —	¦	
111: Eielson	 0-2 2-49 49-71 71-72 	 115-155 15-30 1-5 1-5	 	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
112: Eielson	i	 115-155 15-30 1-5 1-5	 	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	ı .	Cation exchange capacity		
	I In.	I I meq/100 g	I I meq/100 g	I I pH
	3-15 15-33 33-72	15-30 5-15	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
113: Eielson	2-49 49-71 71-72	15-30 1-5 1-5	 	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
Tanana	0-3 3-6 6-25	15-30 5-20	 	 4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
114: Ester	 0-9 9-12 12-21	 	 115-155 15-30 10-25 	 3.6-4.5 4.5-5.5 4.6-5.8
Ester	9-12 12-21	 	 115-155 15-30 10-25 	 3.6-4.5 4.5-5.5 4.6-5.8
Fairbanks	3-30	15-30	 	 5.6-6.0 5.6-6.0 6.1-7.3
Fairbanks	3-30		 	 5.6-6.0 5.6-6.0 6.1-7.3
118: Fairbanks	 0-3 3-30 30-72	15-30	 	 5.6-6.0 5.6-6.0 6.1-7.3
119: Fairbanks	 0-3 3-30	Ì	 	 5.6-6.0 5.6-6.0 6.1-7.3
Fairbanks	0-3 3-30	 115-155 15-30 5-15 	 	 5.6-6.0 5.6-6.0 6.1-7.3
sloping	3-30 30-72	 115-155 15-30 5-15	 	 5.6-6.0 5.6-6.0 6.1-7.3
Fairbanks, steep	0-3 3-30 30-72		 	 5.6-6.0 5.6-6.0 6.1-7.3

Map symbol and soil name		l exchange	cation	 Soil reaction
	 In. 	l meq/100 g	l meq/100 g	і І рН І
	3-30	 115-155 15-30 5-15 	 	 5.6-6.0 5.6-6.0 6.1-7.3
	2-5 5-27 27-33	115-155 15-30 5-15 5-10 	 	5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
	3-30 30-72	 115-155 15-30 5-15 	i i i	 5.6-6.0 5.6-6.0 6.1-7.3
Steese	0-2 2-5 5-27	115-155 15-30 5-15 5-10 —-	 	5.1-6.5 5.1-6.0 5.1-6.0 5.1-6.0 6.1-6.5
	2-10	 115-155 5-10 1-5	 	 5.1-6.1 5.6-6.5 5.6-7.3
	3-15 15-33	 115-155 15-30 5-15 1-5 	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
	3-6 6-12	 115-155 15-30 1-5 1-5 	 	5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
	3-6 6-12	 115-155 15-30 1-5 1-5 —-	 	5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
	3-6 6-12	 115-155 15-30 1-5 1-5 	 !	5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
Gilmore	3-6 6-12	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
Gilmore	3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5

Map symbol and soil name	 Depth 	 Cation exchange capacity 	cation exchange	 Soil reaction
	 In.	l meq/100 g	l meq/100 g	l pH
	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 —-	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
àilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
	 0-9 9-12 12-21 21-72	 	 115-155 15-30 10-25 	 3.6-4.5 4.5-5.5 4.6-5.8
	3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 		 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
	 0-9 9-12 12-20 20-72 		15-30 5-15 	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
34: Goldstream	Ì	 	 70-120 15-30 5-15 	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
	9-12 12-20 20-72		 70-120 15-30 5-15 	 3.6-4.5 4.5-5.5 4.5-5.5 4.5-5.5
Histels	 0-12 12-17 17-26 26-72 		115-155 120-210 	 3.6-4.5 3.6-5.0 3.6-5.0 5.1-6.0
136: Histels	l	 	 115-155 120-210 	 3.6-4.5 3.6-5.0 3.6-5.0 5.1-6.0
137: Jarvis	i	 115-155 15-30 1-5 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3

Map symbol and soil name	I Depth I I	Cation exchange capacity	cation exchange	Soil reaction
	I In.	_I I meq/100 g	I I meq/100 g	I I pH
8:				
arvis	0-3 3-6	115-155 15-30		5.6-6.6 5.1-6.5
	6-24 24-72	1-5 1-5		5.6-7.3 5.6-7.3
	I	I	i	I
nena	0-4 4-9	115-155 5-20		5.1-6.0 5.6-6.5
	9-72	1-5		5.6-6.5
9: _.				
rvis	0-3 3-6	115-155 15-30		5.6-6.6 5.1-6.5
	6-24	1-5		5.6-7.3
	24-72 	1-5 		5.6-7.3
lchaket			115-155	4.5-5.6
	3-24 24-45	15-30 5-15		5.1-6.0 5.6-7.3
	45-72	1 1-5		6.1-7.3
):				
meta	0-20 20-72			4.5-5.0 5.1-6.1
:		1	1	
cum		115-155		6.1-7.3
	3-11 11-15	120-240 —-		6.1-7.3 4.5-5.5
	15-70	5-25		6.1-7.3
	70-72 	5-10 		6.1-7.3
oonku		120-210		6.1-7.3
	2-6 6-47	5-30 5-10		6.1-7.3 6.1-7.5
	47-72	1-5		6.1-7.5
2.				
nto	0-5 5-9			4.5-5.0 5.6-6.5
	9-16	i	5-15	5.6-6.0
	16-72 	5-15 		6.1-6.5
3: nto	 0-5		 115-155	 4.5-5.0
	5-9	i		5.6-6.5
	9-16 16-72	 5-15		5.6-6.0 6.1-6.5
			i	
	0-5	! —		 4.5-5.0
	5-9 0.16	 		5.6-6.5
	9-16 16-72	5-15	!	5.6-6.0 6.1-6.5
i:				
nto				4.5-5.0
	5-9 9-16			5.6-6.5 5.6-6.0
	16-72	5-15		6.1-6.5
atanika		! —	115-155	 4.5-6.1
	4-6 6-21	 5-15		4.5-5.5 4.5-6.1
	21-72	I —-		5.6-6.5

Map symbol and soil name	ı .	 Cation exchange capacity 		
	I In. 	l l meq/100 g l	l meq/100 g 	I pH
	5-9 9-16 16-72	 5-15	 115-155 15-30 5-15 	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
Chatanika	4-6	 5-15	115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
147: Minto	 0-5		l	 4.5-5.0
	5-9 9-16	 5-15	15-30 5-15 	5.6-6.5 5.6-6.0 6.1-6.5
Chatanika	0-4 4-6 6-21	 5-15	115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
Minto	5-9 9-16 16-72		115-155 15-30 5-15 	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
Chatanika	4-6 6-21	—- 5-15	115-155 15-30 	 4.5-6.1 4.5-5.5 4.5-6.1 5.6-6.5
Mosquito	18-24	30-50	 	 5.1-6.1 5.6-6.6 5.6-6.6
	18-24 24-72	30-50		 5.1-6.1 5.6-6.6 5.6-6.6
Noonku	2-6 6-47	5-30	 	 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
	2-6 6-47	 120-210 5-30 5-10 1-5 	 !	 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
	2-4 4-39 39-72	 115-155 120-240 5-25 1-5 	 	 6.1-7.3 6.1-7.3 6.1-7.3 6.1-7.3

Map symbol and soil name	I Depth I I I	Cation exchange capacity 	l cation l exchange	Soil reaction
	 In.	meq/100 g	meq/100 g	pH
153: North Pole	 0-2 2-4 4-39 39-72	 115-155 120-240 5-25 1-5	 	 6.1-7.3 6.1-7.3 6.1-7.3 6.1-7.3
Mosquito	 0-18 18-24 24-72	 115-155 30-50 	i i	 5.1-6.1 5.6-6.6 5.6-6.6
_iscum	 0-3 3-11 11-15 15-70 70-72	 115-155 120-240 5-25 5-10	 15-30 	 6.1-7.3 6.1-7.3 4.5-5.5 6.1-7.3 6.1-7.3
54: North Pole	0-2 2-4 4-39 39-72	 115-155 120-240 5-25 1-5	 	 6.1-7.3 6.1-7.3 6.1-7.3 6.1-7.3
Noonku	 0-2 2-6 6-47 47-72	 120-210 5-30 5-10 1-5		 6.1-7.3 6.1-7.3 6.1-7.5 6.1-7.5
55: Peede	0-2 2-72	 120-210 5-9 		 6.1-7.3 6.1-7.3
56: Peede	0-2 2-72	 120-210 5-9		 6.1-7.3 6.1-7.3
Mosquito	 0-18 18-24 24-72	 115-155 30-50 	 	 5.1-6.1 5.6-6.6 5.6-6.6
57: Piledriver	 0-3 3-15 15-33 33-72	 115-155 15-30 5-15 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
58: Piledriver	0-3 3-15 15-33 33-72	 115-155 15-30 5-15 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Eielson	 0-2 2-49 49-71 71-72	 115-155 15-30 1-5 1-5 	 	 5.1-7.1 5.6-7.1 6.1-7.6 6.1-7.6
59: Piledriver	3-15 15-33 33-72	 115-155 15-30 5-15 1-5	 	 5.6-6.6 5.1-6.5 5.6-7.3 5.6-7.3
Fubar	 0-2 2-10 10-72		 	 5.1-6.1 5.6-6.5 5.6-7.3
160: Pits, gravel	 	 		

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Map symbol and soil name	· ·	l exchange l capacity	cation	 Soil reaction
	I I In.	l meq/100 g	l meq/100 g	l pH
161: Quarry pits	 	 	 	
162: Riverwash	 	; 	; 	
	3-24 24-45	 15-30 5-15 1-5 	 	 4.5-5.6 5.1-6.0 5.6-7.3 6.1-7.3
	3-24 24-45 45-72	 15-30 5-15 1-5 	 	4.5-5.6 5.1-6.0 5.6-7.3 6.1-7.3
	0-30 30-63	5-15 5-15 5-10	I —-	6.1-7.3 6.1-7.8 6.1-7.8
	16-21	15-30	I —-	 4.5-5.5 5.1-6.6 6.1-7.3
				 4.5-5.5 5.1-6.6 6.1-7.3
	16-21		I —-	 4.5-5.5 5.1-6.6 6.1-7.3
	16-21 21-72	15-30	I —-	 4.5-5.5 5.1-6.6 6.1-7.3
Minto	5-9 9-16	 	15-30 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
	16-21 21-72	15-30	 	 4.5-5.5 5.1-6.6 6.1-7.3
Minto	5-9 9-16	 	115-155 15-30 5-15	 4.5-5.0 5.6-6.5 5.6-6.0 6.1-6.5
Steese	0-2 2-5 5-27 27-33 33-72	5-15	 	5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
171: Steese	 0-2 2-5 5-27 27-33	5-15 5-10	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5

Map symbol and soil name	 Depth 	 Cation exchange capacity 	cation exchange	 Soil reaction
	 In. 	meq/100 g	l meq/100 g	I рН
172: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 		 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
173: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
174: Steese	I	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
175: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
176: Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
Gilmore	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
177: Steese	 0-2 2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
Gilmore	 0-3 3-6 6-12 12-19 19-72 	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
178: Steese	2-5 5-27 27-33 33-72	 115-155 15-30 5-15 5-10 	 	 5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
Gilmore	 0-3 3-6 6-12 12-19 19-72 	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5

Map symbol and soil name	l Depth 	Cation exchange capacity	l cation l exchange	Soil reaction
	I	 meq/100 g	l meq/100 g	l pH
179:	 		1	1
	0-2 2-5 5-27 27-33 33-72	115-155 15-30 5-15 5-10 	 	5.1-6.5 5.1-6.0 5.1-6.0 6.1-6.5
	 0-3 3-6 6-12 12-19 19-72	 115-155 15-30 1-5 1-5 	 	 5.1-6.0 5.6-6.0 5.6-6.0 6.1-6.5
180:				
	0-9 9-11 11-17 17-72 	 20-40 5-20 	 	3.5-5.0 5.1-6.0 5.1-6.0 5.1-6.0
181:		 	i	i
	0-3 3-6 6-25 25-72 	115-155 15-30 5-20 	 	4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
182: Tanana			i	i
	3-6 6-25 25-72	115-155 15-30 5-20 	 	4.5-5.0 5.1-6.0 5.6-7.3 6.6-7.3
Mosquito	 0-18 18-24 24-72 	 115-155 30-50 	 	 5.1-6.1 5.6-6.6 5.6-6.6
183:			i	i
Typic Cryaquents	0-6 6-72	120-210 15-30		5.6-7.3 6.1-7.3
	13-30 30-72	 5-15 5-15	115-155 	 4.5-5.6 5.1-6.0 5.5-6.1
Terric Cryofibrists	 0-28 28-40 40-72	 115-155 120-240 30-50	 	 5.0-6.0 5.6-6.6 5.6-6.6
184:				
	0-1 1-49 49-72 	115-155 10-20 5-10 	I —-	5.5-6.6 6.1-7.3 6.1-7.3
185:			i	
	0-30 30-63 63-72 	5-15 5-15 5-10 	I —-	6.1-7.3 6.1-7.8 6.1-7.8
Urban land		i	i	i
186: Urban land	 	 	 	i i
187: Water	 	!	 	

Table 9. Water Features

(See text for definitions of terms used in this table. Ponding depth is the estimated range in the depth of water on the surface. Soil moisture status depth is the upper and lower depth below the soil surface.)

Map symbol	Hydro logic	l I Month	I Flood	ling	 l	Ponding		Soil Me	bisture Status
and soil name	group 	 	IFrequency	l Duration	IFrequency	l Duration	l Depth	l Depth	Status
			1			1	l In.	l In.	
01: 3olio	I D	I Apr Jun I IJul Sep I I	 Rare Rare 	 Brief Brief 	i I Frequent I I I I	i I Long I I I	 12 0 	 0 8 8 72 0 5 5 16 16 72 	i IWet IWet, frozen IMoist IWet IWet, frozen
02: Bradway	 D	l IApr Jun	l IOccasional	l I Brief	l I Frequent	l I Long	 12 0	 0 24	l IWet
	 	l IJul Sep I	l IOccasional I	 Brief 	l I Frequent I	l I Long I	 12 0 	24 72 0 26 26 72	lWet, frozen lWet lWet, frozen
03: Chatanika	 	 Apr May Jun Sep 	 None 		 Frequent 	 Long 	 40 	 0 12 12 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet, frozen
04: Chatanika	D	 Apr May Jun Sep 	 None None 		 Frequent 	 Long 	 40 	 0 12 12 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet, frozen
05: Chatanika	I D	 Apr May Jun Sep 	 None None 		 Frequent 	 Long 	 40 	 0 12 12 72 0 8 8 21 21 72	l IWet IWet, frozen IMoist IWet IWet, frozen
06: Chatanika	I D	 Apr May Jun Sep 	 None None 		I I Frequent I I I	 Long 	 40 	 0 12 12 72 0 8 8 21 21 72	 Wet Wet, frozen Moist Wet Wet, frozen
07: Chatanika	 	I Apr May J Jun Sep I	 None None 		I Frequent I I I	I Long I I I	 40 	 0 12 12 72 0 8 8 21 21 72	I Wet Wet, frozen Moist Wet Wet, frozen
Goldstream	 	 Apr Jun Jul Sep 	 None None 		 Frequent 	 Long 	 12 0 	 0 10 10 72 0 8 8 20 20 72 	l IWet IWet, frozen IMoist IWet IWet, frozen I
08: Chena	 A 	 Apr Sep 	 Rare 	 Brief 	 None 	 	 	 0 72 	l IDry to mois
11: Tielson	 B 	 Apr 	 Occasional 	 Brief 	 Frequent 	l Long L	 60 	 0 4 4 14 14 47 47 72	 Wet Wet, frozen Moist Wet
		 May 	 Occasional 	I Brief I I	I Frequent I I	I I Long I I	 60 	47 72 0 8 8 18 18 47 47 72	IWet IWet, frozen IMoist IWet
		IJun Sep	lOccasional	l Brief				0 47 47 72	IDry to mois

Map symbol	Hydro logic	l I Month	I Flood	ling	 	Ponding		Soil M	oisture Status
and soil name	l group		Frequency	l Duration	IFrequency	l Duration	l Depth	l Depth	Status
12: Eielson	 B 	 Apr 	 Occasional 	 Brief 	 Frequent 	 Long 	In. 6 0 	In. 0 4 4 14	 Wet Wet, frozen
		 May Jun Sep	 Occasional Occasional	 Brief Brief	 Frequent 	 Long 	 60 	14 47 47 72 0 8 8 18 18 47 47 72 0 47	IMoist IWet IWet, frozen IMoist IWet IDry to moist
		I						47 72 	lWet
Piledriver	B 	Apr 	Rare 	Brief 	l Frequent	l Long l l	60 	0 4 4 14 14 47 47 72	lWet lWet, frozen lMoist lWet
		May 	Rare 	Brief Brief	l Frequent I I	l Long l l	60 	0 12 12 22 22 47 47 72 0 47	IWet IWet, frozen IMoist IWet
		IJun Sep I	Rare 	Brief 				47 72 	IDry to moist IWet
13: cielson	 B 	 Apr 	 Occasional 	 Brief 	 Frequent 	l l Long l l	 60 	 0 4 4 14 14 47 47 72	l IWet IWet, frozen IMoist IWet
		May 	lOccasional 	Brief 	Frequent 	l Long l l	60 	0 8 8 18 18 47 47 72	IWet IWet, frozen IMoist IWet
	i	IJun Sep	lOccasional I	Brief	i			0 47 47 72	IDry to moist
anana	D	 Apr May Jun	 Rare Rare	l Brief Brief	l Frequent 	 Long 	 60 	 0 12 12 72 0 6	l IWet IWet, frozen IMoist
		I IJul Sep	 Rare	 Brief				6 18 18 72 0 12 12 25	lWet lWet, frozen lMoist lWet
14: Ester	 D	 Apr Sep	 None		 None			25 72 0 4 4 9	IWet, frozen IMoist Wet
		 						9 72 	Wet, frozen
15: ster	 D 	 Apr Sep 	 None 		I I None I I			 0 4 4 9 9 72 	l IMoist IWet IWet, frozen I
16: Fairbanks	і В	l IApr Sep	l I None		 None			0 72	I Dry to moist
17: airbanks	 B	I Apr Sep	I I None		 None			 0 72	l IDry to moist
18: airbanks	 	l IApr Sep	 None		 None			 0 72	I Dry to moist
19: airbanks	 B	I Apr Sep	 None		 None			 0 72	I IDry to moist
20: Fairbanks	В	l IApr Sep	l None		l I None			0 72	I Dry to moist

Map symbol	l Hydro I logic	l I Month	l Flood	ling	 	Ponding		Soil Moisture Status		
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	l Depth	Status	
	[In.	In.	- : 	
21:			1		I		1	1	1	
⁻ airbanks, strongly sloping	I B I	IApr Sep I	None 		None 			0 72 	IDry to moist	
airbanks, steep	I I В	l IApr Sep	l None		 None			 0 72	l IDry to mois	
22:		1	1							
 Fairbanks	В	IApr Sep	l None		l None		i	0 72	IDry to moist	
Steese	İB	lApr Sep	 None 		None			072	Dry to mois	
23: Fairbanks	i B	l IApr Sep	l None		l I None		i	 0 72	l IDry to moist	
Steese	I	l IApr Sep	l I None		 None		l	 0 72	l IDry to moist	
						Ì	į			
24: Fubar	C	 Apr Sep 	 Rare 	l I Brief	 None 			 0 54 54 72	l IDry to moist IWet	
Piledriver	B	l I Apr	 Rare	l I Brief	l I Frequent	l Long	 6 0	 0 4	l IWet	
		1	1				1	4 14 14 47	lWet, frozen IMoist	
	İ	i	i	İ	i	i.	i	47 72	lWet	
		May	Rare	Brief	Frequent	Long	60	0 12 12 22	lWet IWet, frozen	
		1	1	i	I		i	22 47	Moist	
	l	1	!	!	I	1	1	47 72	Wet	
		IJun Sep	Rare 	Brief 				0 47 47 72	IDry to mois IWet	
25: Gilmore	 I D	I I IApr Sep	I I None	1	l I None	1		 0 72	I I IDry to mois	
		ļ	1	1		1	1	1		
26: Gilmore	D	IApr Sep	I None		None	1		0 72	IDry to mois	
27:										
Gilmore	ID 	Apr Sep 	None 		None 		I	0 72 	IDry to mois	
28: Gilmore	 I D	l IApr Sep	l I None		l I None			 0 72	l IDry to mois	
29:		1	1				1	1		
Gilmore	İ D	lApr Sep	l None		l None	i	i	072	IDry to mois	
30: Gilmore	 D	l IApr Sep	l I None		l I None	i I	l	 0 72	l IDry to mois	
31:			1				i	1		
Gilmore	İ D	 Apr Sep 	None	 	None	 		0 72	IDry to mois	
Ester	D	IApr Sep	None		None	 	i	04 49	lMoist lWet	
		- 	- 					972	Wet, frozen	
32: Gilmore		I Apr Sep	I I None		l I None		1 	 0 72	I Dry to mois	
Steese	I.	 Apr Sep	 None	 	 None	 		 0 72	IDry to mois	
33:	 	 								
33: Goldstream	D	I Apr Jun	I I None		l Frequent	l Long	12 0	 0 10	l IWet	
		l IJul Sep	I I None		1		1	1072 08	lWet, frozen IMoist	
	Ì				i		i	8 20	lWet	
	l	1	1	I		1	1	20 72	Wet, frozen	

Map symbol	Hydro logic	l I Month	l Flood	ling		Ponding		Soil Moisture Status		
and soil name	l group		IFrequency	l Duration	IFrequency	Duration	l Depth	l Depth	Status	
	1						l In. I	l In. I		
34: Goldstream	 D 	 Apr Jun Jul Sep 	 None None 		 Frequent 	 Long 	 12 0 	 0 10 10 72 0 8 8 20 20 72 	l IWet IWet, frozen IMoist IWet IWet, frozen I	
35: Goldstream	I	 Apr Jun Jul Sep 	 None None 	 	 Frequent 	 Long 	 12 0 	 0 10 10 72 0 8 8 20	 Wet Wet, frozen Moist Wet	
	İ	i	i		i	i	i	20 72	lWet, frozen	
Histels	D 	 Apr Jun Jul Sep 	 None None 		Frequent 	i Long 	12 0 	0 10 10 72 0 17 17 72	l Wet Wet, frozen Wet Wet, frozen	
36: Histels	 D 	 Apr Jun Jul Sep	 None None		 Frequent 	 Long 	 12 0 	 0 10 10 72 0 17 17 72	 Wet Wet, frozen Wet Wet, frozen	
37:										
Jarvis	B 	Apr May	Rare Rare	l Brief l l l Brief	l Occasional I I	i Long I I	40 	0 12 12 22 22 72 0 16	l Wet Wet, frozen Dry to moist Wet	
	 	 Jun Sep 	 Rare 	l I I Brief I		 	 	16 24 24 72 0 72 	lWet, frozen IDry to moist IDry to moist I	
38: Jarvis	 B 	 Apr 	 Rare 	l I Brief I	 Occasional 	l I Long I	 40 	 0 12 12 22 22 72	l IWet IWet, frozen IDry to moist	
		May Jun Sep	Rare Rare	Brief Brief				0 16 16 24 24 72 0 72	IWet IWet, frozen IDry to moist IDry to moist	
Chena	I.	 Apr Sep	 Rare	 Brief	l I None	i	i	 0 72	IDry to moist	
							į			
39: Jarvis	B 	Apr May	 Rare Rare	I Brief I I I Brief	I IOccasional I I	I Long L	40 	 0 12 12 22 22 72 0 16	l IWet IWet, frozen IDry to moist IWet	
		l Jun Sep	 Rare	 Brief				16 24 24 72 0 72	IWet, frozen IDry to moist IDry to moist	
Salchaket	і IВ	 Apr	 Rare	 Brief	 Frequent 	 Long 	60	 0 8 8 18	IWet IWet, frozen	
		 May 	 Rare 	l Brief	l I Frequent I	l Long	 60 	18 72 0 12 12 22 22 72	IDry to moist IWet IWet, frozen IDry to moist	
	i I	lJun Sep I	Rare 	l Brief		 		0 72 	IDry to moist	
40: Lemeta	 D 	 Apr Jun 	 Rare 	l I Brief I	 Frequent 	l I Long I	 12 0 	 0 20 20 72	l IWet IWet, frozen	
		IJul Sep	Rare 	Brief 				0 20 20 72	lWet lWet, frozen	

Map symbol	Hydro logic	l I Month	I Flood	ling		Ponding		Soil M	oisture Status
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	Depth	Status
	' 	 	۱	 	' 		In.	 In.	- '
41: iscum	I D	 Apr 	 Rare 	 Brief 	 Frequent 	 Long 	 12 0 	 0 4 4 14	l IWet IWet, frozen
		 May 	 Rare 	l Brief	l Frequent	l Long	 12 0 	14 72 4 12 12 22 22 72	IWet IWet IWet, frozen IWet
		Jun 	Rare 	Brief 	Frequent 	Long 	12 0 	0 18 18 20 20 72	IWet IWet, frozen IWet
		IJul Sep	 Rare 	Brief 				0 4 4 72	IMoist IWet
Noonku	İ D	Apr 	 Occasional 	Brief 	Frequent 	Long 	12 0	0 4 4 14 14 72	' Wet Wet, frozen Wet
		May	lOccasional I	Brief 	Frequent 	l Long	120	4 12 12 22 22 72	IWet IWet, frozen IWet
		Jun 	lOccasional I	l Brief	l Frequent l	i Long I	12 0 	0 18 18 20 20 72	lWet lWet, frozen lWet
		IJul Sep	lOccasional l	Brief 				0 8 8 72 	lMoist lWet
42: 1into	 B 	 Apr 	 None 	 	 None 	 	 	 0 4 4 20 20 30	 Moist Wet Wet, frozen
		 May 	 None 		 None 			30 72 0 8 8 20 20 30	IDry to moist IMoist IWet IWet, frozen
10		IJun Sep	I I None I		 None 			30 72 0 72 	IDry to moist
13: linto	 B 	 Apr 	 None 	 	 None 	1	 	 0 4 4 20 20 30	I IMoist IWet IWet, frozen
		 May 	 None 		 None 			30 72 0 8 8 20 20 30	IDry to moist IMoist IWet IWet, frozen
		 Jun Sep 	 None 	 	 None 		 	30 72 0 72 	IDry to moist IDry to moist I
14: linto	 B 	 Apr 	 None 	 	 None 	 	 	 0 4 4 20 20 30	l IMoist IWet IWet, frozen
		 May 	 None 		 None 			30 72 0 8 8 20 20 30	IDry to moist IMoist IWet IWet, frozen
		l IJun Sep	 None		 None			30 72 0 72 	IDry to moist IDry to moist

Table 9.	Water Features-	-Continued

Map symbol	Hydro logic	l I Month	I Flood	ling		Ponding		Soil M	oisture Status
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	Depth	Status
	— : i	' 	 I		!	 I I	In.	 In.	- ' I I
45: Vinto	i I B	 Apr	 None		 None	i		 0 4	 Moist
						i	i	4 20 20 30	lWet lWet, frozen
	I						ļ	30 72	IDry to moist
	I	May 	None 		None 	1	1	0 8 8 20	lMoist lWet
	I		1				1	20 30 30 72	IWet, frozen IDry to moist
	I	lJun Sep I	None 		None 		1	0 72 	IDry to moist
Chatanika	I D	lApr May I	None 		l Frequent	l Long	4 0 	0 12 12 72	lWet IWet, frozen
	i	Jun Sep	None			i i	i	0 8 8 21	IMoist IWet
	i	i	i			i	į	21 72	Wet, frozen
46: Ainte		 0 mm					į		l IMoist
<i>l</i> into	D	Apr 	None 		None 		ļ	0 4 4 20	lWet
							ļ	20 30 30 72	Wet, frozen
	I	May 	None 		None 	1	I I	0 8 8 20	lMoist IWet
	l I	 					1	20 30 30 72	Wet, frozen
	I	IJun Sep I	None 		None 		1	0 72 	IDry to moist
Chatanika	D 	lApr May I	None 		l Frequent	l Long	4 0 	0 12 12 72	lWet IWet, frozen
	I	lJun Sep I	None 			1	1	0 8 8 21	lMoist lWet
	i	i I	i I			i I	i	21 72	lWet, frozen
47: <i>A</i> into	i I B	 Apr	 None		 None	i	i	 0 4	 Moist
						i	į	4 20 20 30	Wet Wet, frozen
							į	30 72	IDry to moist
		May 	None 		None 	!	ļ	0 8 8 20	lMoist lWet
						1	ļ	20 30 30 72	Wet, frozen
	I	Jun Sep 	None 		None 		1	0 72 	IDry to moist
Chatanika	D 	Apr May 	None 		l Frequent	Long 	4 0 	0 12 12 72	lWet IWet, frozen
		lJun Sep I	None 				1	08 821	lMoist IWet
	I	1	1	1		1	1	21 72 	lWet, frozen
48: ⁄linto	I I B	l I Apr	l I None		I I None	Ì	i I	 0 4	l IMoist
						i	i	4 20 20 30	Wet Wet, frozen
	i	 May	l None		 None	i	i	30 72 0 8	IDry to moist
							į	8 20 20 30	lWet
							ļ	30 72	Wet, frozen
		Jun Sep 	None 		None	!		0 72 	IDry to moist
hatanika	Ì	Apr May 	None 		l Frequent	Long	40	0 12 12 72	lWet IWet, frozen
		lJun Sep I	None 					0 8 8 21	lMoist IWet
						1		21 72 	lWet, frozen
19: Iosquito	 D	l IApr Jun	l I Rare	l I Brief	l I Frequent	l I Long	 12 0	 0 12	l IWet
	I	l IJul Sep	 Rare	 Brief				12 72 0 24	lWet, frozen lWet
	I				i	Ì	i	24 72	Wet, frozen

Map symbol	Hydro logic	l I Month	I Flood	ling		Ponding		Soil M	oisture Status
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	l Depth	Status
				1			l In.	l In.	
50:	i			I	i		1	I	
Mosquito	D	Apr Jun	Rare	Brief	Frequent	Long	12 0	0 12	lWet
		l IJul Sep	 Rare	l I Brief				12 72 0 24	lWet, frozen IWet
	i	 			i		1	24 72	Wet, frozen
Noonku		l I Apr	 Occasional	l I Brief	l I Freguent	 Long	 12 0	 0 4	l IWet
						l		4 14	Wet, frozen
	I	I	T	I	I.	I	I.	14 72	lWet
	1	May	lOccasional	Brief	Frequent	l Long	12 0	4 12	lWet
		1						12 22 22 72	Wet, frozer
	1	l Jun	l Occasional	l Brief	I Frequent	Long	112 0	0 18	lWet lWet
	i							18 20	Wet, frozen
	1	1	T	I	I.	I.	I.	20 72	lWet
		IJul Sep	lOccasional	Brief		1		08	Moist
	1	1		1				8 72 	lWet
51:	Ì	1		 Delef	l I Francisco est	i I I ann			
Noonku	D	Apr	lOccasional	Brief	Frequent	Long	12 0	0 4 4 14	lWet IWet, frozen
	1					i	i	14 72	Wet, 1102er
	i	I May	IOccasional	I Brief	Frequent	I Long	12 0	4 12	lWet
	1	1	T	I	1 ·	1	I.	12 22	Wet, frozen
		1				! .		22 72	lWet
		Jun	lOccasional	Brief	Frequent	Long	12 0	0 18 18 20	lWet lWet, frozer
	1	1			1	ł	1	20 72	Wet, hozer
	i	IJul Sep	Occasional	Brief	i	i	i	08	Moist
	1	1		1	1	1		872	lWet
52:	Ì			1				1	
North Pole	I D	l Apr	Rare	Brief	Frequent	Long	60	04	lWet
		1				1		4 14	Wet, frozen
	1	I May	Rare	l Brief	I Frequent	Long	 6 0	14 72 4 12	lWet lWet
	i					l	100	12 22	Wet, frozer
	i	i	i	i	i	i	i	22 72	lWet
		Jun	Rare	Brief	Frequent	Long	60	0 18	lWet
		1				-		18 20	Wet, frozer
	1	l Jul	Rare	l Brief		1	1	20 72 0 72	lWet lWet
	i	Aug Sep	Rare	Brief		i	i	0.2	Moist
	ļ			1	!			872	lWet
53:	Ì			1	i		1	1	
North Pole	D	l Apr	Rare	Brief	Frequent	l Long	60	0 4	lWet
		1		1				4 14 14 72	Wet, frozer
	1	I May	I Rare	l Brief	I Frequent	I I Long	 6 0	4 12	IWet
	i							12 22	Wet, frozer
	I	I	T	I	I	I	I	22 72	lWet
	1	Jun	Rare	Brief	Frequent	Long	60	0 18	lWet
		1	1	1				18 20	Wet, frozen
		l Jul	I Rare	l Brief				20 72 0 72	lWet lWet
	i	Aug Sep	Rare	Brief		I	i	0 8	Moist
	1		1	1			1	872	Wet
Mosquito	I D	l IApr Jun	I I Rare	l I Brief	l Frequent	l Long	 12 0	 0 12	l IWet
1	I	1	I	I			1	12 72	Wet, frozer
	I	Jul Sep	Rare	Brief	I	1	1	0 24	lWet
	1	1	1	1	1	1	1	24 72	Wet, frozen

Map symbol	Hydro logic	l I Month	l Flood	ling	 l	Ponding		Soil M _ I	oisture Status
and soil name	l group	 	IFrequency	l Duration	IFrequency	l Duration	I Depth	Depth _ I	Status _ I
							In. 	l In. I	
53: _iscum	 D	 Apr	l I Rare	l I Brief	l I Frequent	 Long	 12 0	 0 4	l IWet
	1	1	1	1		1		4 14 14 72	lWet, frozen lWet
	l	May	Rare	l Brief	 Frequent	l Long	 12 0	4 12	lWet
								12 22 22 72	lWet, frozen IWet
	Ì	Jun	l Rare	Brief	Frequent	Long	12 0	0 18	lWet
		1		1				18 20 20 72	lWet, frozen IWet
		Jul Sep	Rare	Brief	l		Ì	0 4 4 72	lMoist lWet
			!	1				472	
54: North Pole	 D	l I Apr	 Rare	l I Brief	l I Frequent	l I Long	 60	 04	l IWet
		1	1	1			1	4 14 14 72	lWet, frozen IWet
	l	May	Rare	Brief	 Frequent	Long	60	4 12	lWet
		1						12 22 22 72	lWet, frozen
	Ì	Jun	Rare	Brief	Frequent	Long	60	0 18	Wet
		1		1				18 20 20 72	Wet, frozer
		Jul	Rare	Brief	l	Ì		072	lWet
		IAug Sep	Rare	Brief 				0 8 8 72	lMoist lWet
Noonku	 D	l I Apr	l IOccasional	l I Brief	l I Frequent	 Long	 12 0	 0 4	l IWet
		1	1	1			I	4 14 14 72	lWet, frozen lWet
	l	May	lOccasional	Brief	 Frequent	Long	12 0	4 12	lWet
		1		1				12 22 22 72	Wet, frozer
	i	Jun	Occasional	Brief	Frequent	Long	12 0	0 18	lWet
				1	I			18 20 20 72	Wet, frozer
		IJul Sep	lOccasional	Brief	l	1		0 8 8 72	lMoist IWet
55: Peede	 D	l I Apr	l IOccasional	l I Brief	l I Frequent	l I Long	 12 0	 04	l Wet
					1			4 14 14 72	lWet, frozer
		May	Occasional	Brief	Frequent	Long	12 0	4 12	lWet
		1		1				12 22 22 72	Wet, frozer
		l Jun	lOccasional	Brief	l Frequent	Long	12 0	0 18 18 20	lWet lWet, frozer
			1	I I	l		I	20 72	lWet
		IJul Sep	lOccasional I	Brief 	 			0 8 8 72	lMoist IWet
56:	1	1	1				1		1
Peede	İ D	l Apr	Occasional	l Brief	l Frequent	l Long	120	04	Wet frozen
								4 14 14 72	lWet, frozer lWet
		May 	lOccasional I	Brief	l Frequent	l Long	12 0 	4 12 12 22	lWet lWet, frozer
	Ì	i .				i .		22 72	lWet
		Jun 	lOccasional I	Brief 	l Frequent	Long 	12 0 	0 18 18 20	lWet lWet, frozen
	I			 Briof	l	1	1	20 72	Wet
	ļ	IJul Sep	lOccasional l	Brief 				0 8 8 72	lMoist IWet
Aosquito	 D	l IApr Jun	l I Rare	l I Brief	l I Frequent	l I Long	 12 0	 0 12	l IWet
		l IJul Sep	l I Rare	l I Brief			1	12 72 0 24	lWet, frozen IWet
		ioui Och	1 1010	Dici				24 72	Wet, frozen

Map symbol	Hydro logic	Month	l Flood	ing	I	Ponding		Soil Moisture Status		
and soil name	group	 	IFrequency	l Duration	IFrequency	l Duration	Depth _ I	Depth _ I	Status _	
							In. 	In. 	1	
157: Piledriver	। I В	 Apr	 Rare	l I Brief	l I Frequent	 Long	 6 0	 0 4	l IWet	
								4 14	Wet, froze	
	I	I	I	T	I.	I	I	14 47	Moist	
	I.		!			1		47 72	Wet	
		May	Rare	Brief	Frequent	Long	60	0 12 12 22	lWet lWet, froze	
	ł	1	ì	1		1		22 47	Moist	
	i	i	i	i	i	i	i	47 72	Wet	
	ļ	IJun Sep	l Rare	Brief	l	1	I	0 47	IDry to moi	
	1							47 72 	lWet	
158:	i		Ì	İ	i .	i.	İ	İ	i I	
Piledriver	I B	l Apr	Rare	Brief	l Frequent	l Long	60	0 4 4 14	lWet lWet, frozei	
	ł	1	i	1	i	1	1	14 14	Moist	
	i	i	i	i	i	i	i	47 72	Wet	
	I	May	Rare	Brief	Frequent	Long	60	0 12	lWet	
	!	1	1					12 22	Wet, frozer	
	1	1	1	1		1	1	22 47 47 72	lMoist IWet	
	i	lJun Sep	 Rare	l Brief		i	i	0 47	Dry to mois	
					!	1	I	47 72	Wet	
Eielson	I B	l Apr	l Occasional	I Brief	l Frequent	l Long	 6 0	04	lWet	
		1	1					4 14	Wet, frozer	
	ł	1	1			1		14 47 47 72	lMoist IWet	
	i	May	' IOccasional	∣ I Brief	 Frequent	Long	60	108	Wet	
	i			1			İ	8 18	Wet, frozer	
	I	1	1	1	I	1		18 47	Moist	
	I I					1		47 72	lWet	
		IJun Sep I	lOccasional I	Brief 			I	0 47 47 72	IDry to mois	
159:										
Piledriver	I B	l Apr	I Rare	I Brief	I Frequent	I Long	60	I 0 4	lWet	
	!	1	1	1		1		4 14	Wet, frozer	
		1						14 47	lMoist IWet	
	ł	May	I Rare	I Brief	I Frequent	Long	60	47 72 0 12	Wet	
	i							12 22	Wet, frozer	
	Í	Ì	Ì	Ì	Ì	Ì	Ì	22 47	Moist	
	!					1		47 72	lWet	
		IJun Sep I	Rare 	Brief 			l	0 47 47 72	IDry to mois	
Fubar		l IApr Sep	 Rare	l I Brief	l I None	1	1	 0 54	l IDry to mois	
						İ		54 72	Wet	
163:	I						l l	1	1	
Salchaket	I B	Apr	Rare	Brief	Frequent	Long	60	08 818	lWet lWet, frozei	
	i			1		i	i	1872	Dry to mois	
	Í	May	Rare	Brief	Frequent	Long	60	0 12	Wet	
	ļ	1	1	1	!	1	I	12 22	Wet, froze	
		l IJun Sep	 Rare	l I Brief				22 72 0 72	IDry to mois IDry to mois	
164:			1	1		1	1	1		
Salchaket	В	l Apr	Rare	Brief	Frequent	Long	60	08	lWet	
	I	1	1					8 18	Wet, frozer	
		I I May	I I Rare	I I Brief	l Frequent	l Long	 60	18 72 0 12	IDry to mois	
	i							12 22	Wet, frozer	
	I	L	1	1	I	1	1	22 72	Dry to mois	
		IJun Sep	Rare	Brief				0 72	Dry to mois	
Typic Cryorthents	В	Apr Sep	 Rare	I Brief	None	i		0 72	IDry to mois	
Typic Cryorthents	I B	lApr Sep	Rare	I Briet	None	1		0 72	Dry to m	

Map symbol	l Hydro l logic	 Month	l Flood	ling		Ponding		Soil M	oisture Status
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	l Depth	Status
65:	! ! !	 	 	· 		· 	In. 	In. 	_ :
Saulich	D 	IApr May I IJun Sep I I	None None 	 	l Frequent I I I I	Long 	40 	0 10 10 72 0 8 8 21 21 72 	IWet IWet, frozen IMoist IWet IWet, frozen I
66: Saulich	 	 Apr May Jun Sep 	 None None 		 Frequent 	 Long 	 40 	 0 10 10 72 0 8 8 21 21 72 	l IWet IWet, frozen IMoist IWet IWet, frozen I
67: Saulich	I	 Apr May Jun Sep 	 None None 		 Frequent 	 Long 	 40 	 0 10 10 72 0 8 8 21 21 72	l IWet IWet, frozen IMoist IWet IWet, frozen
68: Saulich	 	 Apr May Jun Sep 	 None None 		 Frequent 	 Long 	 40 	 0 10 10 72 0 8 8 21 21 72	l IWet IWet, frozen IMoist IWet IWet, frozen
Vinto	 	 Apr May	 None None	 	 None None	 		 0 4 4 20 20 30 30 72 0 8	l IMoist IWet IWet, frozen IDry to moist IMoist
69:		I I IJun Sep I	 None 		 None 			8 20 20 30 30 72 0 72 	IWet IWet, frozen IDry to moist IDry to moist
Saulich	I	Apr May Jun Sep 	None None 		Frequent 	Long 	40 	0 10 10 72 0 8 8 21 21 72	Wet Wet, frozen Moist Wet Wet, frozen
Лinto	 	 Apr 	 None 	 	I I None I I	 		 0 4 4 20 20 30 30 72	l IMoist IWet IWet, frozen IDry to moist
		May Jun Sep	None None		None None			0 8 8 20 20 30 30 72 0 72	IMoist IWet IWet, frozen IDry to moist IDry to moist
70: Steese	 B	 Apr Sep	 None	 	 None			 0 72	I I IDry to moist
71: Steese	 B	 Apr Sep 	 None	 	 None	 		 0 72	l I IDry to moist
72: Steese	і IВ I	 Apr Sep 	 None 	 	 None 	 	 	 0 72 	 Dry to moist
73: Steese	 	 Apr Sep 	 None 	 	 None 	 		 0 72 	l IDry to moist I
74: Steese	 B 	l IApr Sep	 None 		l I None	1		 0 72	l IDry to moist

Map symbol	l Hydro I logic	l I Month	I Flood	ling		Ponding		Soil M	oisture Status
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	l Depth	Status
	 						l In.	l In.	
75:							ļ		i
Steese	IB	Apr Sep 	None 		None 		1	0 72 	IDry to mois
76: Steese		l IApr Sep	l None		l I None		Ì	 0 72	I IDry to mois
	I.	1	T		I.		ļ	I	1
Gilmore	I D	Apr Sep 	None 		None 		1	0 72 	IDry to mois
177: Steese	 B	l IApr Sep	l I None		l I None		1	 0 72	l IDry to mois
	I.	1 · · ·	T		I		į	I.	1
Gilmore	I D I	Apr Sep 	None 		None 		1	0 72 	IDry to mois
78: Steese	l I B	l IApr Sep	l I None		l I None	1		 0 72	l IDry to mois
	I.	1	T		I		į	I	1
Gilmore	ID I	Apr Sep 	None 		None 		1	0 72 	IDry to mois
79: Steese	 B	l IApr Sep	l I None		l I None	1		 0 72	l IDry to mois
	I	1	T		I	İ	į	I	1
Gilmore	ID I	Apr Sep 	None 		None 		I I	0 72 	IDry to mois
80: Tanacross		l IApr May	 Rare	l I Brief	l I Frequent	 Long	 60	 0 8	l IWet
		l'Í	T	I				8 72	Wet, frozen
		lJun Sep I	Rare 	Brief 	I		I I	0 17 17 72	lWet lWet, frozen
81:			1					1	1
Tanana	İ D	Apr May	Rare	Brief	l Frequent	Long	60	0 12	Wet
		l Jun	I Rare	l Brief	I		I	1272 06	lWet, frozen IMoist
			1				1	6 18 18 72	lWet IWet, frozen
	İ	Jul Sep	Rare	Brief	İ	i	i	0 12	Moist
					I		I I	12 25 25 72	lWet lWet, frozen
82:			1				1	1	1
Tanana	İ D	Apr May	Rare	Brief	l Frequent	l Long	160	0 12	Wet
		l Jun	Rare	l Brief	I		Ì	1272 06	lWet, frozen IMoist
							1	6 18 18 72	lWet IWet, frozen
	Ì	Jul Sep	Rare	Brief		i	i	0 12	Moist
					I		I I	12 25 25 72	lWet lWet, frozen
Mosquito	 I D	l IApr Jun	 Rare	l I Brief	l I Frequent	l I Long	 12 0	 0 12	l IWet
- 1		1	I	I			1	12 72	Wet, frozen
		IJul Sep	Rare	Brief 			1	0 24 24 72	lWet lWet, frozen
83:	l	1	1			1	1	1	1
Typic Cryaquents	İ D	l Apr	Frequent	Long	l Frequent	Long	60	04	Wet
					1		Ì	4 14 14 72	lWet, frozen lWet
	l	May 	l Frequent	l Long	l Frequent	l Long	6 0 	0 12 12 22	lWet lWet, frozen
	İ	i I I hur	i I Tarana i	 Delet	i I Fara di di	 	i	22 72	lWet
		Jun 	Frequent 	Brief 	l Frequent	Long 	6 0 	0 18 18 20	lWet lWet, frozen
	I	l IJul Sep	 Eroquent	l I Brief	l I Frequent	l I Brief		20 72 0 72	lWet lWet
		 	Frequent 				6 0 		

Map symbol	Hydro logic	l I Month	I Flood	ding		Ponding		Soil Moisture Status		
and soil name	l group		IFrequency	Duration	IFrequency	Duration	l Depth	l Depth	Status	
	' 	 	۱ ۱ ۱	 	' 	 	_ ' In. 	 In.	_ ' 	
33: listic Cryaquepts	 D 	 Apr 	 None 		 Frequent 	l Long L	 12 0 	 0 4 4 14 14 72	l IWet IWet, frozen IWet	
	 	May 	None 		l Frequent I	Long 	12 0 	0 12 12 24 24 72	lWet lWet, frozen lWet	
	 	Jun 	None 		l Frequent I	l Long l	12 0 	0 18 18 22 22 72	lWet lWet, frozen lWet	
		Jul Sep 	None 		 	 	 	0 16 16 72 	lMoist lWet l	
erric Cryofibrists	D 	Apr 	None 	 	l Frequent I I	Long 	12 0 	0 4 4 14 14 72	lWet lWet, frozen lWet	
	 	May 	None 		l Frequent I I	Long 	12 0 	0 12 12 22 22 72	lWet lWet, frozen lWet	
	 	Jun 	None 		l Frequent I I	l Long l l	12 0 	0 18 18 20 20 72	lWet lWet, frozen lWet	
34:		IJul Sep	None 		l Frequent	Long 	12 0 	0 72 	lWet I	
ypic Cryorthents	B 	Apr Sep 	Rare 	Brief	None			0 72	Dry to moist	
ss: ypic Cryorthents, fill	B 	 Apr Sep 	 Rare 	l Brief	 None 	 		 0 72 	I Dry to moist	

Table 10. 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	l Rest	rictive layer		Subs	idence	Potential	Risk of corro	osion
and soil name	l Kind	Depth to top	 Hardness	 Initial	 Total	frost action	Uncoated	l IConcrete
	I I	! In.	. 1 	In.	 In.	 		I
01: Bolio	l IPermafrost I	 14-28 	l Strongly cemented	 5-10 	 15-30 	l High	l High	l High
02: Bradway	l Permafrost 	 18-35 	l IStrongly cemented	 	 	l I High I	I I IModerate	I IModerate
03: Chatanika	 Permafrost 	 12-39 	l IStrongly cemented	 	 	l I High I	I I IModerate I	 Moderate
04: Chatanika	 Permafrost 	 12-39 	l IStrongly cemented	 	 	l I High I	I I IModerate I	 Moderate
05: Chatanika	 Permafrost 	 12-39 	l IStrongly cemented	 	 	l l l High l	 Moderate 	 Moderate
06: Chatanika	 Permafrost 	 12-39 	l Strongly cemented	 	 	l I High I	 Moderate 	 Moderate
07: Chatanika	I IPermafrost I	 12-39 	l Strongly cemented	 	 	l High	 Moderate 	 Moderate
Goldstream	 Permafrost 	 14-24 	l IStrongly I cemented	 1-6 	 6-12 	l I High I	l High I	l I High I
08: Chena	l I Inone	 	 	 	 	 Low	 Moderate	 Moderate
09: Dumps, landfill	Inone		 	 		 	 	
10: Dumps, mine	Inone		 	 		 	 	
11: Eielson	l Inone	 	 	i i	 	l I High	l IModerate	 Moderate
12: Eielson	l Inone	 	 	 	 	l High	l IModerate	i IModerate
Piledriver	l Inone	 	 	 	 	l I High	l IModerate	l IModerate
13: Eielson	l I Inone	 	 	 	 	 High	 Moderate	 Moderate
「anana	l IPermafrost I	 16-47 	l IStrongly I cemented	 	 	l I High I	 Moderate 	 Moderate
14: Ester	l I IPermafrost	 7-30	l I IStrongly I cemented	 	 	 High	 High	l I I High
	Bedrock (paralithic)	14-39 	IStrongly I cemented					
15: Ester	l IPermafrost I	 7-30	l Strongly cemented			' High 	l High	i High
	Bedrock (paralithic)	14-39 	IStrongly I cemented			 	 	
16: Fairbanks	l Inone	 	 	 	 	l High	 Moderate	I I IModerate

Map symbol	I Rest	rictive layer		Subs	idence	l Potential _l for	Risk of corro	osion
and soil name	l I Kind	Depth to top	l I Hardness	 Initial	l I Total	I frost I action	Uncoated	l IConcrete
	I	' In.	- \ 	_	 In.	- \ 		
117: Fairbanks	l Inone	 	 	 	 	l High	 Moderate	 Moderate
118: Fairbanks	 none	 	i 	i i	i 	l I High	l IModerate	l IModerate
119: Fairbanks	l Inone	 	 	i 	i 	l I High	l IModerate	i IModerate
120: Fairbanks	l Inone	 	 		i i	l I High	l IModerate	I Moderate
121: Fairbanks, strongly sloping	Inone	 	 	 		l I High I	l IModerate	 Moderate
Fairbanks, steep	I Inone I		 		 	l High	I Moderate	IModerate
122: Fairbanks	Inone				 	l I High	l IModerate	l IModerate
Steese	l IBedrock (paralithic) I	 20-40 	I IModerately I cemented		 	I IModerate I	I IModerate I	I IModerate I
123: Fairbanks	Inone		 		 	l High	 Moderate	 Moderate
Steese	Bedrock (paralithic) 	20-40	Moderately		 	Moderate	Moderate	Moderate
124: Fubar	l Inone		 		 	l Low	l IModerate	 Moderate
Piledriver	Inone					l High	IModerate	IModerate
125: Gilmore	l IBedrock (paralithic)	 13-24 	 Moderately cemented	 		 Moderate 	 Moderate 	 Moderate
126: Gilmore	l IBedrock (paralithic) I	 13-24 	I IModerately I cemented	 	 	I I IModerate I	I I IModerate I	I I IModerate
127: Gilmore	l Bedrock (paralithic) 	 13-24 	I I IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
128: Gilmore	 Bedrock (paralithic) 	 13-24 	l I IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
129: Gilmore	l I IBedrock (paralithic) I	 13-24 	l I IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
130: Gilmore	l I IBedrock (paralithic) I	 13-24	 Moderately cemented	 	 	 Moderate 	l I IModerate I	 Moderate
131: Gilmore	l I IBedrock (paralithic)	 13-24	I I IModerately I cemented	 	 	I I IModerate	I I IModerate	 Moderate
Ester	 Permafrost	 7-30	l IStrongly	 	 	l High	l High	 High
	l IBedrock (paralithic) I	 14-39 	l cemented IStrongly l cemented					

Map symbol	l Rest	rictive layer		Subs	idence	Potential	Risk of corro	sion
and soil name	l Kind	I Depth I to top	 Hardness	 Initial	l I Total	frost action	Uncoated	l IConcrete
	I	 In.	- I 	_ ' In.	 In.	- ' 		I
132: Gilmore	' Bedrock (paralithic) 	 13-24 	 Moderately cemented	 	 	 Moderate 	 Moderate 	 Moderate
Steese	 Bedrock (paralithic) 	 20-40 	l IModerately l cemented			 Moderate 	 Moderate 	 Moderate
133: Goldstream	l IPermafrost	 14-24 	l IStrongly I cemented	 1-6 	 6-12 	 High 	 High 	 High
134: Goldstream	 Permafrost 	 14-24 	I IStrongly I cemented	 1-6 	 6-12 	I I High I	I High I	I I High I
135: Goldstream	l IPermafrost I	 14-24 	l IStrongly I cemented	 1-6 	 6-12 	l High	l High	l High
Histels	 Permafrost 	 16-24 	l IStrongly l cemented	 8-18 	 16-35 	 High 	 High 	 High
136: Histels	l IPermafrost I	 16-24 	l IStrongly I cemented	 8-18 	 16-35 	l High	l High	l High
137: Jarvis	I I Inone	 	 	 	 	I I IModerate	I I IModerate	I IModerate
138: Jarvis	l Inone	 	 	i 	i 	 Moderate 	l Moderate	 Moderate
Chena	Inone	i	- 	i	i	Low	IModerate	IModerate
139: Jarvis	, Inone	 	 			I Moderate	I I IModerate	I IModerate
Salchaket	Inone		- 	i	i	IModerate	Moderate	Moderate
140: Lemeta	 Permafrost 	 15-24 	l IStrongly I cemented	 8-16 	 16-32 	 High 	 High 	l High
141: Liscum	l I Inone		 	 1-6	 6-12	l I High	I I IModerate	l IModerate
Noonku	Inone		 			l High	I IModerate	I Moderate
142: Minto	I I Inone		 	 	 	l I I High	I I I High	I I I High
143: Minto	 none 		 	i i	; ;	l I High I	l High	l High
144: Minto	 none 	 	 	 	 	 High 	 High 	 High
145: Minto	l Inone	 	 	 		l I High	l I High	l I High
Chatanika	l IPermafrost I	 12-39 	l IStrongly l cemented l	 	 	l I High I	I IModerate I	I IModerate I
146: Minto	 none 	 	 	 	 	l High	 High 	 High
Chatanika	IPermafrost I	12-39 	lStrongly I cemented	i	i	High 	IModerate	IModerate

Map symbol		Restrictive layer		Subs	idence	Potential _ for	Risk of corro	osion
and soil name	l I Kind	I Depth I to top I	 Hardness 	 Initial 	l I Total	frost action	Uncoated	l IConcrete
		In. 		In. 	In. 			
147: Minto	l Inone		 			l I High	l I High	l I High
Chatanika	l IPermafrost I	 12-39 	l IStrongly l cemented		 	l I High I	I IModerate I	I IModerate
148: Minto	Inone				 	l I High	l I High	 High
Chatanika	l IPermafrost I	 12-39 	l IStrongly I cemented	 	 	l High I	l IModerate I	I IModerate
149: Mosquito	l I IPermafrost I	 14-31 	l I IStrongly I cemented	 1-6 	 10-12 	l I I High I	 Moderate 	 Moderate
150: Mosquito	 Permafrost 	 14-31 	l Strongly cemented	 1-6 	 10-12 	l High	 Moderate 	 Moderate
Noonku	l Inone I	 	 	 	 	l I High I	l IModerate	l IModerate
151: Noonku	l Inone	 	 		 	l High	l Moderate	I IModerate
152: North Pole	l Inone	 	 			l High	I I IModerate	I IModerate
153: North Pole	l Inone		 		 	l High	l Moderate	I IModerate
Mosquito	 Permafrost 	 14-31 	l IStrongly I cemented	 1-6 	 10-12 	l I High I	l IModerate I	 Moderate
Liscum	l Inone I	 	 	 1-6 	 6-12 	l I High I	l IModerate	l IModerate
154: North Pole	l Inone	 	 		 	l High	l IModerate	I IModerate
Noonku	Inone		 			l High	IModerate	 Moderate
155: Peede	Inone	 	 		 	l I High	 Moderate	 Moderate
156: Peede	l Inone		 	 		l High	l Moderate	I Moderate
Mosquito	l IPermafrost I	 14-31 	l IStrongly I cemented	 1-6 	 10-12 	l I High I	l IModerate I	I IModerate
157: Piledriver	l I Inone	 	 	 	 	l l l High	l I IModerate	I I IModerate
158: Piledriver	Inone					l I High	 Moderate	 Moderate
Eielson	Inone					l High	I Moderate	I Moderate
159: Piledriver	l Inone	 	 	 	 	l High	I I IModerate	I I IModerate
Fubar	l					l I Low	l Moderate	l Moderate
160: Pits, gravel	l I Inone	 	 	 	 	 	 	
161: Pits, quarry	l I Inone	 	 	 	 	 	 	
162: Riverwash	l I Inone	 	 	 	 	 	 	

Map symbol	l Rest	trictive layer		Subs	idence	Potential for	Risk of corro	osion
and soil name	 Kind	Depth to top	 Hardness	 Initial	l I Total	I frost I action	Uncoated	l IConcrete
	I 	! ! In.	- ' 	 In.	In.	- ' 		
163: Salchaket	l Inone	 	 	 	 	l IModerate	l IModerate	I IModerate
164: Salchaket	 none	 		i i	i i	l IModerate	l Moderate	 Moderate
Typic Cryorthents	Inone					I Moderate	I Moderate	IModerate
165: Saulich	l IPermafrost I	 14-24 	l I IStrongly I cemented	 4-8 	 6-12 	 High 	l High	I I I High I
166: Saulich	l IPermafrost I	 14-24 	l IStrongly I cemented	 4-8 	 6-12 	 High 	I High	l High
167: Saulich	l IPermafrost I	 14-24 	l IStrongly I cemented	 4-8 	 6-12 	I High	I High	I High
168: Saulich	 Permafrost 	 14-24 	l IStrongly I cemented	 4-8 	 6-12 	 High 	 High 	l High
Minto	Inone					l High	l High	l High
169: Saulich	l IPermafrost I	 14-24 	l Strongly cemented	 4-8 	 6-12 	 High 	l High	l High
Minto	l Inone					l I High	l High	l I High
170: Steese	l I IBedrock (paralithic) I	 20-40 	I I IModerately I cemented	 		 Moderate 	I I IModerate	I IModerate
171: Steese	l IBedrock (paralithic) I	 20-40 	I I IModerately I cemented	 		 Moderate 	I I IModerate I	I IModerate
172: Steese	l IBedrock (paralithic) I	 20-40 	I I IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
173: Steese	l I IBedrock (paralithic) I	 20-40 	I IModerately I cemented	 		I I IModerate	I IModerate	I I IModerate
174: Steese	l IBedrock (paralithic) I	 20-40 	I IModerately I cemented	 	 	 Moderate 	I IModerate I	 Moderate
175: Steese	l IBedrock (paralithic) I	 20-40 	I IModerately I cemented	 	 	 Moderate 	I IModerate I	 Moderate
176: Steese	l Bedrock (paralithic) 	 20-40 	I IModerately I cemented	 	 	 Moderate 	I IModerate	 Moderate
Gilmore	l IBedrock (paralithic) I	 13-24 	l IModerately I cemented	 	 	l IModerate I	l IModerate I	 Moderate
177: Steese	 Bedrock (paralithic) 	 20-40	l I IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
Gilmore	l IBedrock (paralithic) I	 13-24 	l IModerately I cemented	 	 	l IModerate	l IModerate	l IModerate

Map symbol	l Res	trictive layer		Subs	idence	Potential for	l Risk of corrosion	
and soil name	l Kind	Depth to top	 Hardness	 Initial	l I Total	frost action	Uncoated	l IConcrete
	I 	I I In.	_ !	_ ! In.	_ ! In.	- !	I	!
178: Steese	l IBedrock (paralithic) I	 20-40 	I IModerately I cemented	 	 	I IModerate	I IModerate	I IModerate
Gilmore	l IBedrock (paralithic)	 13-24 	l IModerately I cemented			 Moderate 	l IModerate I	 Moderate
179: Steese	l IBedrock (paralithic)	 20-40 	l IModerately I cemented	 	 	 Moderate 	 Moderate 	 Moderate
Gilmore	IBedrock (paralithic)	13-24 	IModerately			IModerate	I Moderate	IModerate
180: Tanacross	I IPermafrost I	 10-28 	l Strongly cemented	 1-8 	 8-16 	l High	l High	l High
181: Tanana	I IPermafrost	 16-47 	l IStrongly I cemented	 	 	l I High	I I IModerate	 Moderate
182: Tanana	l IPermafrost I	 16-47 	l IStrongly I cemented	 	 	l I High I	I I IModerate I	 Moderate
Mosquito	l IPermafrost I	 14-31 	l IStrongly I cemented	 1-6 	 10-12 	l I High I	l IModerate I	 Moderate
183: Typic Cryaquents	l I Inone		 			l I I High	l I IModerate	l I IModerate
Histic Cryaquepts	Inone			2-3	3-6	l High	l High	l High
Terric Cryofibrists	Inone			 8-10	16-20	l High	I Moderate	I IModerate
184: Typic Cryorthents	I I Inone		 			I IModerate	I I IModerate	I IModerate
185: Typic Cryorthents, fill	l l l none		 	 		I Moderate	I I IModerate	I IModerate
Urban land	Inone							
186: Urban land	I I Inone		 	 	 		 	
187: Water	l Inone		 				 	

	 Land capability (non-irrigated)
101: Bolio	 7w
102: Bradway	 6w
103: Chatanika	 6w
104: Chatanika	 6w
105: Chatanika	 6w
106: Chatanika	 6w
107: Chatanika Goldstream	 6w 6w
108: Chena	 6s
109: Dumps, landfill	
110: Dumps, mine	 —
111: Eielson	 4w
112: Eielson Piledriver	 4w 4w
113: Eielson Tanana	5w
114: Ester	İ
115: Ester	 7e
116: Fairbanks	 3e
117: Fairbanks	 4e
118: Fairbanks	 6e
119: Fairbanks	 6e
120: Fairbanks	 7e

Table 11. Land Capability

Table 11. Land Capability—Continued

	 Land capability (non-irrigated)
121: Fairbanks, strongly sloping Fairbanks, steep	 4e 7e
122: Fairbanks Steese	 6e 6e
123: Fairbanks Steese	 6e 6e
124: Fubar Piledriver	 6s 4w
125: Gilmore	 4s
126: Gilmore	 4e
127: Gilmore	 6e
128: Gilmore	 6e
129: Gilmore	 7e
130: Gilmore	 7e
131: Ester Gilmore	 7w 6e
132: Gilmore Steese	 6e 4e
133: Goldstream	 6w
134: Goldstream	 6w
135: Goldstream Histels	 6w 7w
136: Histels	 7w
137: Jarvis	 3s
138: Jarvis Chena	 3s 6s

	 Land capability (non-irrigated)
139: Jarvis Salchaket	
140: Lemeta	 7w
41:	
Liscum Noonku	
142: Minto	 4s
143: Minto	 4s
144: Minto	 4e
45:	
Minto Chatanika	
146:	
Minto Chatanika	
147: Minto	
Minto Chatanika	
148:	
Minto Chatanika	
149: Mosquito	l 6w
150:	
Mosquito Noonku	6w 5w
151:	
Noonku	5w
152: North Pole	 5w
53:	
North Pole	5w
Mosquito	6w 6w
154:	-
North Pole	l 5w
Noonku	5w
155:	
Peede	l 5w

Table 11. Land C	apability—Continued
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	 Land capability (non-irrigated)
156: Peede Mosquito	 5w 6w
157: Piledriver	 4s
158: Piledriver Eielson	 4s 3w
159: Piledriver Fubar	 4s 6s
160: Pits, gravel	 _
161: Quarry pits	 _
162: Riverwash	
163: Salchaket	 2c
164: Salchaket Typic Cryorthents	 2c 3s
165: Saulich	 6w
166: Saulich	 6w
167: Saulich	 6e
168: Minto Saulich	
169: Saulich Minto	 6e 6e
170: Steese	 3e
171: Steese	 4e
172: Steese	 6e
173: Steese	 6e
174: Steese	 7e

Table 11. Land Capability—Continued

Map symbol and soil name	Land capability I(non-irrigated)
175: Steese	 7e
176: Steese Gilmore	 6e 6e
177: Steese Gilmore	
178: Steese Gilmore	 7e 7e
179: Steese Gilmore	 7e 7e
180: Tanacross	 6w
181: Tanana	 5w
182: Tanana Mosquito	 5w 6w
183: Typic Cryaquents Histic Cryaquepts Terric Cryofibrists	1 6w
184: Typic Cryorthents	1
185: Typic Cryorthents, fill Urban land	 3s —
186: Urban land	 —
187: Water	 —

Table 11. Land Capability—Continued

Table 12. Forest Productivity

(Absence of an entry indicates that the data were not estimated.)

	Potential produc	Potential productivity				
Map symbol and soil name	l Common trees	 Site index	l Volume l of wood	 Trees to manage 		
	I	I	Cu. Ft./Acre	. I		
01: Bolio	l lblack spruce	 	 	 		
02: Bradway		 	 	 		
03: Chatanika	l Iblack spruce lwhite spruce	 42 67		 		
04: Chatanika	l l Iblack spruce lwhite spruce	 42 67	 <u>—-</u> 29	 		
05: Chatanika	l l Iblack spruce lwhite spruce	 42 67	 <u>—</u> - 29	 		
06: Chatanika	l l Iblack spruce lwhite spruce	 <u></u> 67	 29	 		
07: Chatanika	l I Iblack spruce Iwhite spruce	 42 67	 <u>—-</u> 29	 		
Goldstream	l Iblack spruce	 		 		
08: Chena	l I Ibalsam poplar Iwhite spruce	 80	 9	 white spruce 		
09: Dumps, landfill	 	 	 	 		
10: Dumps, mine	 	 	 	 		
11: Eielson	l Ibalsam poplar Iwhite spruce	 90		 white spruce 		
12: Eielson	lwhite spruce	 90	<u></u> 43	 white spruce 		
Piledriver	lbalsam poplar white spruce 	 43	 14	l lwhite spruce l		
13: Eielson	l Ibalsam poplar Iwhite spruce	 90	<u></u> 43	 white spruce 		
Fanana	I Iblack spruce Iwhite spruce	 22 55 	 14	 		
14: Ester	 	; ;	 	 		
15: Ester	 	 	 	 		
16: Fairbanks	 white spruce paper birch quaking aspen	65	 29 43 57 	 white spruce 		

	Potential produc	Potential productivity				
Map symbol and soil name	Common trees	Site index		 Trees to manage 		
	I	!	Cu. Ft./Acre	_ I		
117:				1		
Fairbanks		i 83		white spruce		
	lpaper birch Iquaking aspen		43 57	1		
10		I		1		
I 18: Fairbanks	lwhite spruce		 29	I Iwhite spruce		
	lpaper birch		43	· ·		
	lquaking aspen	65	57 	1		
19:	l			i		
Fairbanks	lwhite spruce lpaper birch		29 43	white spruce		
	lquaking aspen		57	1		
201						
20: Fairbanks	white spruce	 83	 29	I Iwhite spruce		
	lpaper birch		43	1		
	lquaking aspen	65 	57 	1		
21:		Ì	l	1		
Fairbanks, strongly sloping	 white spruce	 83	 29	l Iwhite spruce		
olophig	lpaper birch		1 43			
	lquaking aspen		57 			
Fairbanks, steep	white spruce		1 29	lwhite spruce		
	lpaper birch		43			
	lquaking aspen I		57 	1		
22: Fairbanks	 utbite_enruse			 bite envice		
Failbailks	lpaper birch		29 43	lwhite spruce		
	lquaking aspen	65	57	į		
Steese	lpaper birch		 43	l Iwhite spruce		
	Iquaking aspen		72	1		
	lwhite spruce Iblack spruce		29 	1		
		I	I	į		
23: Fairbanks	lpaper birch		 43	I Iwhite spruce		
	lquaking aspen	65	l 57	1		
	lwhite spruce		29 	1		
Steese		I 65	43	, lwhite spruce		
	lquaking aspen lwhite spruce	70 85	72 29	1		
			29	1		
24: Fubar	 lbalsam poplar		 	l Ipaper birch, white		
- ubul	lpaper birch	I —-	i —-	spruce		
	lquaking aspen	•	<u> </u>	1		
	lwhite spruce	79 	29 	1		
Piledriver			<u> </u>	lwhite spruce		
	lwhite spruce	74 	14 			
	l.	Ì	Ì	 		
		30	 14	lwhite spruce		
		38				
	lpaper birch Iquaking aspen		29	I		
	lpaper birch	44 68				
Gilmore	lpaper birch lquaking aspen lwhite spruce l	44 68 	29	 		
Gilmore	Ipaper birch Iquaking aspen Iwhite spruce I I Iblack spruce	44 68 30	29 29 	 white spruce		
125: Gilmore 126: Gilmore	lpaper birch lquaking aspen lwhite spruce l	44 68 30 38	29 29 —-	 white spruce 		

	l Potential produc	Potential productivity				
Map symbol and soil name	l Common trees	 Site index 	l Volume	 Trees to manage 		
	I	I	Cu. Ft./Acre	- I 		
		Ì		Ì		
127: Gilmore	Iblack spruce	 30	 	l Iwhite spruce		
	lpaper birch	38				
	Iquaking aspen	44		1		
	lwhite spruce	68	29	1		
28:		l		Ì		
Gilmore		30		lwhite spruce		
	lpaper birch Iquaking aspen	38 44	14 29			
	white spruce		29	1		
00.						
129: Gilmore	lblack spruce	 30	 	l Iwhite spruce		
	lpaper birch	38				
	lquaking aspen		29			
	lwhite spruce	68 	29 	1		
30:	i	Ì		i		
Gilmore		30		lwhite spruce		
	lpaper birch Iquaking aspen	38 44	14 29	1		
	lwhite spruce		29	i		
31:			 	1		
Gilmore	lblack spruce	, 30		white spruce		
	lpaper birch	38		1		
	Iquaking aspen	44				
	lwhite spruce	68 	29 	1		
Ester	<u></u>	!		I		
32:				1		
Gilmore		i 30		white spruce		
	lpaper birch		14			
	lquaking aspen lwhite spruce	44 68	29 29			
04	I	I	I	 		
Steese	Ipaper birch Iquaking aspen	65 70		lwhite spruce		
	white spruce	72		i		
	Iblack spruce	40		1		
33:				1		
Goldstream	İblack spruce	i	i	i		
34:				1		
Goldstream	İblack spruce	i —-		I—-		
				1		
35: Goldstream	I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	<u> </u>	 	 		
		Ì	l	1		
Histels	Iblack spruce		 	I—- I		
36:		Ì		i		
Histels	lblack spruce					
37:				1		
Jarvis		İ 50	I 29	Iwhite spruce		
	Iquaking aspen	60	57			
	lwhite spruce	80	29			

	l Potential produc	 			
Map symbol and soil name	Common trees	 Site index 	of wood	I Trees to manage	
	I	I	Cu. Ft./Acre	- <u> </u>	
38:				1	
Jarvis		50	29	lwhite spruce	
	lquaking aspen lwhite spruce	60 80		1	
0	I	I		i i un	
Chena	lwhite spruce	<i></i> 80		lwhite spruce I	
139:				1	
Jarvis	lpaper birch	50	29	white spruce	
	Iquaking aspen	60	57		
	lwhite spruce	80 	29	1	
Salchaket		94	43	lwhite spruce	
	lbalsam poplar I	 		1	
140: Lemeta	 Iblack spruce	 	 	 	
141: Liscum	Iblack spruce		 	 	
Listum	Itamarack	i		i	
Noonku		 		 	
140.				1	
142: Minto	lwhite spruce	 83	29	ı lwhite spruce	
143:				1	
Minto	lwhite spruce	83	29	white spruce	
144:				1	
Minto	lwhite spruce	83	29	lwhite spruce	
145:				1	
Minto	lwhite spruce	83	29	lwhite spruce	
Chatanika		42		i	
	lwhite spruce	67 	29	1	
146:				i	
Minto	Iwnite spruce	83 	29 	lwhite spruce I	
Chatanika		42	<u> </u>		
	lwhite spruce	67 	29	1	
147: Minto	 white spruce	 83	 29	 white spruce	
	I ·	05	29	lwhite spruce I	
Chatanika	Iblack spruce Iwhite spruce	42 67	29	 	
				į	
148: Minto	I lwhite spruce	 67	29	l Iwhite spruce	
	I ·	I I			
Chatanika	lwhite spruce	<i>—-</i> 67	29	 	
149:				1	
Mosquito				I—-	
	ltamarack			1	
150:				i	
Mosquito	Iblack spruce Itamarack			 	
	I			i	
Noonku			<u> </u>		

	l Potentia	Potential productivity				
Map symbol and soil name	I Common trees	 Site index 	Volume	 Trees to manage 		
	I	!	Cu. Ft./Acre			
151: Noonku	 	 		 		
152: North Pole	l Itamarack Iblack spruce	 37 		 		
53: North Pole	 ltamarack black spruce	 37 	 	 		
Mosquito	I .	 	 	 		
Liscum	l Iblack spruce Itamarack		 	 		
154: North Pole	l I Iblack spruce Itamarack	 	 	 		
Noonku	 			 		
155: Peede			. <u> </u>	 		
156: Peede		 	 	 		
Mosquito	l Iblack spruce Itamarack	 		 		
157: Piledriver	l I Ibalsam poplar Iwhite spruce	 74	14	 white spruce 		
158: Piledriver	Ibalsam poplar Iwhite spruce		 14	 white spruce 		
Eielson	Ibalsam poplar white spruce		 43	l lwhite spruce l		
159: Piledriver	Ibalsam poplar Iwhite spruce	 74	 14	 white spruce 		
Fubar	I Ibalsam poplar Ipaper birch Iquaking aspen Iwhite spruce	 79		lpaper birch, white spruce 		
160: Pits, gravel		 		 		
61: Quarry pits	1	 	 	 		
l 62: Riverwash		 	 	 		
163: Salchaket	 lwhite spruce	 94	 43	 white spruce		
	Ibalsam poplar					

	Potential produc			
Map symbol and soil name	Common trees	Site index		 Trees to manage
	!	!	I ICu. Ft./Acre	I
104.	1	-		1
164: Salchaket	lwhite spruce	 94	 43	I lwhite spruce
Calonakor	lbalsam poplar		i —-	
Typic Cryorthents			 	
65:	Ì	Ì	l	Ì
Saulich	lblack spruce			
66:			1	1
Saulich	Iblack spruce	I	I —-	<u> </u>
67:			1	
Saulich		i	, I —-	
		I	I	1
68: Saulich	 		 	
	I		·	
Minto	lwhite spruce	67	29	lwhite spruce
69:			1	
Saulich		i	I —-	
Minto	Iwhite spruce	67 	29 	lwhite spruce
70:	i	i	i	i
Steese			43	lwhite spruce
	lquaking aspen lwhite spruce		72 29	
	Iblack spruce			1
		1	1	
71: Steese	lpaper birch	 65	 43	I Iwhite spruce
	Iquaking aspen		1 72	
	lwhite spruce	=	29	
	Iblack spruce	40	 	
72:		İ	l	1
Steese			43	white spruce
	Iquaking aspen		72 29	
	lwhite spruce Iblack spruce			1
		I	I	1
73:	 nanar birah	 65	 43	 white enruge
Steese	lquaking aspen	1 70	43 72	lwhite spruce
	lwhite spruce	72	1 29	Ì
	Iblack spruce	40		
74:		ł	 	
Steese	lpaper birch	i 65	43	, lwhite spruce
	lquaking aspen	70	72	1
	lwhite spruce Iblack spruce	72 40	29 	1
			, 	i
75:				1
Steese	lpaper birch Iguaking aspen		43 72	lwhite spruce
	lwhite spruce	70 72	1 29	
	Iblack spruce	40		
	· ·	Ì	I	

	l Potential produc	l Potential productivity					
Map symbol and soil name	Common trees	 Site index 		 Trees to manage 			
······	I	I	I ICu. Ft./Acre	I			
76:				1			
Steese	lpaper birch lquaking aspen lwhite spruce	65 70 85	72 29	lwhite spruce I I			
Gilmore	l Iblack spruce Ipaper birch Iquaking aspen Iwhite spruce	 38 44 68	14 29	 white spruce 			
77:			 				
Steese	ipaper birch Iquaking aspen Iwhite spruce	65 70 85 	43 72	lwhite spruce I I			
77: Gilmore	I I Iblack spruce Ipaper birch	•	 14	l I Iwhite spruce			
	lquaking aspen lwhite spruce	44 68	1 29				
178:		i	İ				
Steese	Ipaper birch quaking aspen white spruce	65 70 85	72	lwhite spruce I I			
Gilmore	lblack spruce Ipaper birch Iquaking aspen Iwhite spruce	<u></u> 38 44 68	<u> </u>	ı lwhite spruce 			
79:		I	 				
Steese	lpaper birch lquaking aspen lwhite spruce	65 70 85 	72	lwhite spruce I I			
Gilmore	lblack spruce Ipaper birch Iquaking aspen Iwhite spruce	 38 44 68	<u> </u>	 white spruce 			
80: Tanacross	black spruce		 	 			
181: Tanana	Iblack spruce Iwhite spruce	 22 55	 14	 			
182:		I					
Tanana	Iblack spruce Iwhite spruce I	22 55 	 14 	 			
Mosquito	lblack spruce Itamarack	 	 	 			
83: Typic Cryaquents		 	 	 			
Histic Cryaquepts		<u> </u>	i				
Terric Cryofibrists		 	 	 			
184: Typic Chyorthopte		I		1			
Typic Cryorthents	 		, <u> </u>	I			

	Potential produc	Potential productivity			
Map symbol and soil name	Common trees	 Site index 	Volume of wood fiber	 Trees to manage 	
	′ 	!!	Cu. Ft./Acre	- 	
185:	1			1	
Typic Cryorthents, fill		! !		<u> </u>	
Urban land				 	
186:				1	
Urban land	·	! !		<u> </u>	
187:	1			1	
Water		i— i		I—-	
				1	

Table 13. Forestland Management: Erosion Hazard, Road Limitations

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	l map	off-road or off-trail 	l on ro	ard of erosion bads and trails	l on n l	Limitations for roads on natural surface		
	unit 	it I (Standard criteria) II Rating class and	(Standard criteria) I Value Rating class and		I	(Alaska criteria) Value Rating class and Valu		
i	i I	I limiting features		limiting features		l limiting features		
101: Bolio	 75 	 Slight 		 Slight 		I I IVery limited: I Ponding I	 1.00	
102: Bradway	 85 	ISlight IS I I I I		I ISlight I I I		I IVery limited: I Ponding I Flooding I Wetness I Low Strength	 1.00 1.00 1.00 0.50	
103: Chatanika	 75 	 Slight 		 Slight 		 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50	
104: Chatanika	 75 	ISlight IS I		 Moderate: Slope/erodibility 	 0.50 	IVery limited: Wetness Ponding Low Strength	 1.00 0.50 0.50	
105: Chatanika	 80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	IVery limited: I Wetness I Ponding I Slope I Low Strength	 0.50 0.50 0.50	
106: Chatanika	 80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Wetness Ponding Low Strength	 1.00 1.00 0.50 0.50	
107: Chatanika	 55 	 Slight 		l ISlight I I		 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50	
Goldstream	 35 	 Slight 		 Slight 		 Very limited: Ponding Low Strength 	 1.00 0.50 	
108: Chena	 90 	l ISlight		l ISlight		l INot limited	 	
109: Dumps, landfill	 100 	I INot rated I		INot rated		 Not rated 		
110: Dumps, mine	 100	INot rated		 Not rated 		 Not rated 		

Map symbol and soil name	l map	off-road or off-trail	on ro 	Hazard of erosion on roads and trails (Standard criteria)		Limitations for roads on natural surface (Alaska criteria)		
		I Rating class and I limiting features	 Value 	 Rating class and limiting features 	 Value 	 Rating class and limiting features 	Value 	
111: Eielson	 	I ISlight I I		I I ISlight I I		I IVery limited: I Flooding I Ponding I Low Strength	 1.00 0.50 0.50	
I 12: Eielson	60	ISlight I I I		I ISlight I I		Very limited: I Flooding I Ponding I Low Strength	 1.00 0.50 0.50	
Piledriver	 30 	l ISlight I I		I ISlight I I		I ISomewhat limited: I Ponding I Low Strength	 0.50 0.50	
113: Eielson	 50 	ISlight I I		I ISlight I I		 Very limited: Flooding Ponding Low Strength	 1.00 0.50 0.50	
Tanana	 35 	 Slight 		I ISlight I I		I IVery limited: I Wetness I Ponding I Low Strength	 1.00 0.50 0.50 	
114: Ester		 Severe: Slope/erodibility Slope/erodibility 	 0.75 0.50 	 Severe: Slope/erodibility Slope/erodibility 	 0.95 0.95 	 Very limited: Slope Low Strength 	 1.00 0.50 	
115: Ester	 75 	 Very severe: Slope/erodibility Slope/erodibility 	 0.95 0.75 	 Severe: Slope/erodibility Slope/erodibility 	 0.95 0.95 	 Very limited: Slope Low Strength 	 1.00 0.50 	
116: Fairbanks	 80 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Low Strength 	 0.50 	
117: Fairbanks		 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Somewhat limited: Slope Low Strength	 0.50 0.50 	
118: Fairbanks	 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	I IVery limited: I Slope I Low Strength	 1.00 0.50	
119: Fairbanks	80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50	
120: Fairbanks	 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50	

Table 13. Forest Management: Erosion Hazard, Road Limitations—Continued

Map symbol and soil name	Pct. of map unit	off-road or off-trail 	l on ro	ard of erosion ads and trails dard criteria)	l on n	ations for roads atural surface ska criteria)	
		I Rating class and I limiting features	 Value 		I	Rating class and limiting features	IValue
121: Fairbanks, strongly sloping	 60 	I I IModerate:	 	I I ISevere:	 	 Somewhat limited:	
eleph g	 	Slope/erodibility 	l0.50 I	Slope/erodibility 	10.95 1	I Slope	10.50 10.50
Fairbanks, steep	 . 30 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
122: Fairbanks	 . 55 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95	Very limited: Slope Low Strength	 1.00 0.50
Steese	 . 30 	I IModerate: I Slope/erodibility I	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
123: Fairbanks	 . 40 	 Moderate: Slope/erodibility 	 0.50	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength	 1.00 0.50
Steese	 . 30 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength 	 1.00 0.50
124: Fubar	 . 50 	l ISlight I		l ISlight I		 Somewhat limited: Low Strength	 0.50
Piledriver	 . 40 	 Slight 		 Slight 		 Somewhat limited: Ponding Low Strength	 0.50 0.50
125: Gilmore	 . 80 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Low Strength 	 0.50
126: Gilmore	 . 70 	 Moderate: Slope/erodibility 	 0.50 	 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Slope Low Strength	 0.50 0.50
127: Gilmore	 . 75 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	IVery limited: Slope Low Strength	 1.00 0.50
128: Gilmore	 . 70 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95	 Very limited: Slope Low Strength	 1.00 0.50
129: Gilmore	 85 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	I Very limited: I Slope I Low Strength	 1.00 0.50
130: Gilmore	 . 85 	 Very severe: Slope/erodibility	 0.95	 Severe: Slope/erodibility	 0.95	 Very limited: Slope Low Strength	 1.00 0.50

Map symbol and soil name	 Pct. of	 Hazard of erosion off-road or off-trail		ard of erosion bads and trails		tions for roads atural surface		
and son name	l map	I	I	ndard criteria)	I	aska criteria)		
		I I Rating class and I limiting features	 Value 	 Rating class and limiting features 	 Value 	 Rating class and limiting features 	IValue I	
131:				 	 	·	 	
Gilmore	140 	IModerate: Slope/erodibility 	 0.50 	Severe: Slope/erodibility 	l0.95	IVery limited: Slope Low Strength	 1.00 0.50	
Ester	 40 	 Severe: Slope/erodibility Slope/erodibility 	 0.75 0.75 	I ISevere: I Slope/erodibility I Slope/erodibility	I I I0.95 I0.95 I	I IVery limited: I Slope I Low Strength	 1.00 0.50 	
132: Gilmore	 65 	ISlight I		 Moderate: Slope/erodibility 	 0.50 	ISomewhat limited: Slope Low Strength	 0.50 0.50	
Steese	 33 	l ISlight I I		 Moderate: Slope/erodibility 	 0.50 	 Somewhat limited: Slope Low Strength 	 0.50 0.50 	
133: Goldstream	 80 	l ISlight I I		 Slight 		 Very limited: Ponding Low Strength	 1.00 0.50	
134: Goldstream	 80 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	IVery limited: I Ponding I Low Strength	 1.00 0.50	
135: Goldstream	 50 	l ISlight I		l ISlight I		I IVery limited: I Ponding I Low Strength	 1.00 0.50	
Histels	 45 	l ISlight I		l ISlight I		IVery limited: Ponding	 1.00	
136: Histels	90	l ISlight I		l ISlight I		IVery limited: Ponding	 1.00	
137: Jarvis	75 	l ISlight I		 Slight 		 Somewhat limited: Low Strength 	 0.50	
138: Jarvis	 55 	l ISlight I		l ISlight I		 Somewhat limited: Low Strength	 0.50	
Chena	 35 	l ISlight I	 	l ISlight I	 	 Not limited 	 	
139: Jarvis	 45 	l ISlight I		l ISlight I		 Somewhat limited: Low Strength	 0.50	
Salchaket	 45 	 ISlight 		 Slight 		 Very limited: Wetness Ponding Low Strength 	 1.00 0.50 0.50 	
140: Lemeta	 75 	ISlight ISlight I		l Slight 		I IVery limited: Ponding	 1.00 	

Map symbol and soil name	Pct. of map unit	off-road or off-trail 	l on ro	ard of erosion vads and trails ndard criteria)	l on n l	ttions for roads atural surface ska criteria)	
		I Rating class and	I Value	Rating class and	I	Rating class and	IValue
	 !	I limiting features	 !	l limiting features	 [l limiting features	 l
41: Liscum	 	 Slight 		 Slight 		I IVery limited: I Ponding I Wetness I Low Strength	 1.00 1.00 0.50
Noonku	 	I ISlight I I I		 Slight 		I IVery limited: I Ponding I Flooding I Wetness I Low Strength	 1.00 1.00 1.00 0.50
142: Minto	 80 	l ISlight I I		 Slight 		 Very limited: Wetness Low Strength 	 1.00 0.50
143: Minto	 70 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	 Very limited: Wetness Low Strength 	 1.00 0.50
144: Minto	 	ISlight I I I I		 Severe: Slope/erodibility 	 0.95 	 Very limited: Wetness Slope Low Strength	 1.00 0.50 0.50
145: Minto	 45 	I ISlight I		 Slight 		 Very limited: Wetness Low Strength	 1.00 0.50
Chatanika	 	 Slight 		 Slight 		 Very limited: Wetness Ponding Low Strength 	 1.00 0.50 0.50
146: Minto	 40 	l ISlight I		 Moderate: Slope/erodibility 	 0.50 	 Very limited: Wetness Low Strength	 1.00 0.50
Chatanika	 	I ISlight I I I		 Moderate: Slope/erodibility 	 0.50 	I IVery limited: I Wetness I Ponding I Low Strength	 1.00 0.50 0.50
147: Minto	 45 	 Slight 		 Severe: Slope/erodibility 	 0.95 	 Very limited: Wetness Slope Low Strength	 1.00 0.50 0.50
Chatanika	 	I ISlight I I I		 Severe: Slope/erodibility 	 0.95 	I IVery limited: I Wetness I Ponding I Slope I Low Strength	 0.50 0.50 0.50

Map symbol and soil name	l map	Hazard of erosion off-road or off-trail (Standard criteria)	l on ro	ard of erosion ads and trails ndard criteria)	l on n	 Limitations for roads on natural surface (Alaska criteria) 			
		I Rating class and I limiting features	 Value 	·	I	Rating class and limiting features	Value		
148: Minto	 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Wetness Low Strength	 1.00 1.00 0.50		
Chatanika	 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Wetness Slope Ponding Low Strength	 1.00 0.50 0.50 0.50		
149: Mosquito	 85 	 Slight 		ISlight I		IVery limited: I Ponding I Low Strength	 1.00 0.50		
150: Mosquito	45 	 Slight 		l ISlight I		IVery limited: I Ponding I Low Strength	 1.00 0.50		
Noonku	40 1 1 1 1	 Slight 		 Slight 		I IVery limited: I Ponding I Flooding I Wetness I Low Strength	 1.00 1.00 1.00 0.50 		
151: Noonku	 	ISlight ISlight I I I		I ISlight I I I		I IVery limited: I Ponding I Flooding I Wetness I Low Strength	 1.00 1.00 1.00 0.50		
152: North Pole	 85 	ISlight I		I ISlight I		IVery limited: I Ponding I Wetness	 1.00 1.00		
153: North Pole	 50 	l ISlight I		l ISlight I		 Very limited: Ponding Wetness	 1.00 1.00		
Mosquito	 30 	l ISlight I		l ISlight I		I IVery limited: I Ponding I Low Strength	 1.00 0.50		
Liscum	 	 Slight 		 Slight 		 Very limited: Ponding Wetness Low Strength 	 1.00 1.00 0.50 		
154: North Pole	 55 	l ISlight I		l ISlight I		 Very limited: Ponding Wetness	 1.00 1.00		
Noonku	 	 Slight 		 Slight 		 Very limited: Ponding Flooding Wetness Low Strength 	 1.00 1.00 1.00 0.50 		

Map symbol and soil name	Pct. of map	off-road or off-trail		ard of erosion ads and trails		tions for roads atural surface	
		(Standard criteria)	(Standard criteria)		(Alas	ska criteria)	
		Rating class and limiting features	 Value 	 Rating class and limiting features 	I Value	Rating class and limiting features	IValue I
155: Peede	 85 	I ISlight I I I I				I IVery limited: I Ponding I Flooding I Wetness I Low Strength	 1.00 1.00 1.00 0.50
56: Peede	70 	 Slight 		ISlight ISlight I I		 Very limited: Ponding Flooding Wetness Low Strength	 1.00 1.00 1.00 0.50
Mosquito	 25 	 Slight 		 Slight 		 Very limited: Ponding Low Strength 	 1.00 0.50
157: Piledriver	 75 	 Slight 		 Slight 		 Somewhat limited: Ponding Low Strength	 0.50 0.50
158: Piledriver	50 	 Slight 		l ISlight I		 Somewhat limited: Ponding Low Strength	 0.50 0.50
Eielson	 35 	 Slight 		 Slight 		 Very limited: Flooding Ponding Low Strength	 1.00 0.50 0.50
159: Piledriver	 50 	 Slight 		l ISlight I		ISomewhat limited: Ponding Low Strength	 0.50 0.50
Fubar	 40 	l ISlight I		l ISlight I		I ISomewhat limited: I Low Strength	 0.50
160: Pits, gravel	 	INot rated		INot rated		INot rated	
161: Pits, quarry	 	I INot rated I		I I INot rated I		I I INot rated I I	
162: Riverwash	 100	 Not rated 		I INot rated		I INot rated	
163: Salchaket	 85 	 Slight 		 Slight 		 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50

Map symbol I and soil name I I	map	off-road or off-trail	l on ro	ard of erosion ads and trails Idard criteria)	l on n	ations for roads atural surface ska criteria)	
		I I Rating class and I limiting features	 Value 	 Rating class and limiting features 	 Value 	Rating class and limiting features	IValue
 164: Salchaket	45	I ISlight I I		I I ISlight I I		 Very limited: Wetness Ponding Low Strength	 1.00 0.50 0.50
ا Typic Cryorthentsا	 40 	l ISlight I		l ISlight I		 Not limited 	
165: Saulich 	 80 	 Slight 		 Moderate: Slope/erodibility 	 0.50 	 Very limited: Low Strength Ponding	 1.00 0.50
166: Saulich 	80	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	Very limited: Low Strength Ponding Slope	 1.00 0.50 0.50
167: Saulich 	75	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	Very limited: Low Strength Slope Ponding	 1.00 1.00 0.50
168: Saulich 	 40 	l ISlight I I		 Moderate: Slope/erodibility 	 0.50 	I IVery limited: I Low Strength I Ponding I Slope	 1.00 0.50 0.50
Minto	 40 	 Slight 		 Severe: Slope/erodibility 	 0.95 	 Very limited: Wetness Low Strength Slope	 1.00 0.50 0.50
 169: Saulich 	 40 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Low Strength Slope Ponding	 1.00 1.00 0.50
Minto		 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Wetness Low Strength	 1.00 1.00 0.50
170: Steese	 80 	i I ISlight I		I Moderate: I Slope/erodibility	 0.50	 Somewhat limited: Low Strength 	 0.50
171: Steese	 80 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	ISomewhat limited: Slope Low Strength	 0.50 0.50
172: Steese	 70 	 Moderate: Slope/erodibility 	 0.50 	I Severe: Slope/erodibility	 0.95 	I IVery limited: I Slope I Low Strength	 1.00 0.50
173: Steese	 75 	 Moderate: Slope/erodibility 	 0.50 	 Severe: Slope/erodibility 	 0.95 	IVery limited: I Slope I Low Strength	 1.00 0.50

Map symbol and soil name	l Pct. I of I map	Hazard of erosion off-road or off-trail		ard of erosion ads and trails		tions for roads atural surface					
	l unit			ndard criteria)	Alaska criteria)						
	Rating class and I limiting features	Value 	 Rating class and limiting features 	I Value	 Rating class and limiting features 	IValue I					
174:	 	 	i	 	 	· 	 				
Steese	85 	ISevere: Slope/erodibility 	 0.75 	Severe: Slope/erodibility 	 0.95 	IVery limited: Slope Low Strength	 1.00 0.50				
175: Steese	 	I Very severe: I Slope/erodibility	 0.95 	 Severe: Slope/erodibility 	 0.95 	I IVery limited: I Slope I Low Strength	 1.00 0.50				
176: Steese	 	 Moderate: Slope/erodibility	 0.50	I Severe: Slope/erodibility	 0.95	I IVery limited: I Slope I Low Strength	 1.00 0.50				
Gilmore	25 	 Moderate: Slope/erodibility 	 0.50 	 Moderate: Slope/erodibility 	 0.50 	Very limited: Slope Low Strength	 1.00 0.50				
177: Steese	50 	I IModerate: I Slope/erodibility	 0.50 	I ISevere: I Slope/erodibility	 0.95 	IVery limited: Slope Low Strength	 1.00 0.50				
Gilmore	40	Moderate: Slope/erodibility 	 0.50 	Severe: Slope/erodibility 	 0.95 	IVery limited: I Slope I Low Strength	 1.00 0.50				
178: Steese	 50 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	I IVery limited: I Slope I Low Strength	 1.00 0.50				
Gilmore	 40 	 Severe: Slope/erodibility 	 0.75 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength 	 1.00 0.50 				
179: Steese	 45 	IVery severe: Slope/erodibility	 0.95 	 Severe: Slope/erodibility 	 0.95 	IVery limited: Slope Low Strength	 1.00 0.50				
Gilmore	 45 	 Very severe: Slope/erodibility 	 0.95 	 Severe: Slope/erodibility 	 0.95 	 Very limited: Slope Low Strength 	 1.00 0.50 				
180: Tanacross	 90 	l ISlight I		 Slight 		 Somewhat limited: Ponding Low Strength	 0.50 0.50				
181: Tanana	 	 Slight 		ISlight I I I		I Very limited: I Wetness I Ponding I Low Strength	 1.00 0.50 0.50				
182: Tanana	 60 	ISlight I I		ISlight I I		IVery limited: IVery limited: I Wetness I Ponding I Low Strength	 1.00 0.50 0.50				
Mosquito	 20 	 Slight 		 Slight 		I IVery limited: I Ponding I Low Strength	 1.00 0.50				

Map symbol and soil name	Pct.	Hazard of erosionoff-road or off-trail	Hazard of erosionon roads and trails			Limitations for roads on natural surface		
	l map I unit	 (Standard criteria)	l I (Standard criteria)		l I (Alas	l I (Alaska criteria)		
	 	Rating class and I limiting features	Value 	 Rating class and limiting features 	Value 	 Rating class and limiting features 	Value 	
183: Typic Cryaquents	30	 ISlight 		 ISlight 		 Very limited: Ponding Flooding Low Strength	 1.00 1.00 0.50	
Histic Cryaquepts	25	l ISlight I		 Slight 		IVery limited: Ponding Low Strength	 1.00 0.50	
Terric Cryofibrists	20	I IVery Severe I High organic content	 1.00 	I IVery Severe I High organic content	 1.00	IVery limited: Ponding Low Strength	 1.00 0.50	
184: Typic Cryorthents	80	i I ISlight I		l I ISlight I		I Somewhat limited: Low Strength	 0.50	
185: Typic Cryorthents, fill	45	l ISlight		l ISlight		 Not limited		
Urban land	45 	INot rated	i	I INot rated		Not rated		
186: Urban land	 100	I INot rated		 Not rated 		 Not rated 		
187: Water	 100	I INot rated	 	I INot rated		 Not rated 		

Table 14. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)	 (S	Dwellings with basements standard criteria)		commercial puildings andard criteria)	
		 Rating class and limiting features		I Rating class and I limiting features	I	Rating class and limiting features	IValue
101: Bolio	 75 	 Very limited Depth to permafrost Ponding Subsidence Flooding Depth to saturated zone	 1.00 1.00 1.00 1.00 	I very limited I Depth to I permafrost I Ponding I Subsidence I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	 Very limited Depth to Permafrost Ponding Subsidence Flooding Depth to saturated zone	L 1.00 1.00 1.00 1.00 1.00
102: Bradway	 85 	I IVery limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 1.00 0.80 	I IVery limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	1.00 1.00 	I IVery limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 0.80
103: Chatanika	 75 	 Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99 	 IVery limited Ponding Depth to saturated zone Depth to permafrost		 Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99
104: Chatanika	 	Very limited Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99 	I IVery limited I Ponding I Depth to I saturated zone I Depth to I permafrost	1.00 0.99	 Very limited Ponding Depth to saturated zone Depth to permafrost Slope	 1.00 1.00 0.99 0.12
105: Chatanika	 	I Very limited I Ponding I Depth to I saturated zone I Depth to I permafrost I Slope	 1.00 0.99 0.16 	I IVery limited I Ponding I Depth to I saturated zone I Depth to I permafrost I Slope	1.00 0.99 	IVery limited I Ponding I Depth to I saturated zone I Slope I Depth to I permafrost	 1.00 1.00 1.00 0.99
106: Chatanika	 80 	I Very limited I Ponding I Depth to I saturated zone I Slope	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Slope	1.00 1.00 	Very limited Slope Ponding Depth to saturated zone	 1.00 1.00 1.00
		Depth to permafrost	10.99 	Depth to	10.99 I	Depth to	10.99 I

Map symbol and soil name	Pct of map	Dwellings without		Dwellings with basements		commercial puildings	
	unit 	(Standard criteria) 		Rating class and	U Value	andard criteria)	IValue
	 	l limiting features	 	limiting features	I	l limiting features	
07:	1		1	1	1	1	1
Chatanika	. 55	Very limited	i	Very limited		Very limited	i
	I	Ponding	1.00	Ponding		Ponding	1.00
	1	Depth to	11.00	Depth to	1.00	Depth to	1.00
		 saturated zone Depth to 		saturated zone	ا ا0.99	saturated zoneDepth to	
	ļ	permafrost	10.99 	Depth to		permafrost	0.99
Goldstream	. 35	I IVery limited	I	I IVery limited		I Very limited	I
	1	Depth to	1.00	Depth to		Depth to	1.00
		permafrost Ponding	 1.00	permafrostPonding		permafrostPonding	 1.00
	1	Depth to	11.00	Depth to	11.00	Depth to	1.00
	i	saturated zone		saturated zone		saturated zone	
08:	1	1	1	1	1	1	1
Chena	. 90	IVery limited	i	IVery limited	i	IVery limited	i
	1	Flooding 	1.00 	Flooding 	1.00 	Flooding 	1.00
09:		 N =4 under el	Ì	 N =4 meterel	Ì	 	Ì
Oumps, landfill	. 100 	INot rated		Not rated		INot rated	
10:			i				ļ
Dumps, mine	 	INot rated I I		INot rated I I I I I I I I I I I I I I I I I I I		INot rated I I	
11:	 						
Eielson	.180	Very limited	 1.00	Very limited	 1.00	Very limited Ponding	 1.00
	1	Flooding	11.00	Flooding		Flooding	1.00
	i	Depth to	1.00	Depth to	11.00	Depth to	1.00
	1	saturated zone	1	saturated zone	1	saturated zone	1
12: Eielson		l IVery limited	i	l IVery limited	i	l IVery limited	i
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00
	i	Flooding	1.00	Flooding		Flooding	1.00
	1	Depth to	1.00	Depth to	1.00	Depth to	1.00
		<pre>saturated zone</pre>	1	<pre>saturated zone</pre>		saturated zone	
Piledriver	. 30	Very limited	I.	Very limited		Very limited	I
		Ponding	11.00	Ponding	11.00	Ponding	11.00
	1	Flooding Depth to	11.00 11.00	Flooding Depth to		Flooding Depth to	1.00 1.00
	i	saturated zone		saturated zone		saturated zone	
13:							
ielson	.150	Very limited		IVery limited		Very limited	
	i I	Ponding Flooding	1.00 1.00	Ponding Flooding		Ponding Flooding	1.00 1.00
	i	Depth to	11.00	Depth to	11.00	Depth to	1.00
	i	saturated zone		saturated zone		saturated zone	
anana	. 35	Very limited		Very limited		Very limited	
	1	Ponding	1.00	Ponding		Ponding	1.00
	1	Flooding Depth to	1.00 1.00	Flooding		FloodingDepth to	1.00 1.00
	i I	 Depth to saturated zone 	1.00	Depth tosaturated zone	11.00	saturated zone	11.00
		, Saturated 20116	1	J Saturated 20116			1
	1	Depth to	10.86	Depth to	10.86	Depth to	10.86

Table 14. Building Site Development: S	Structures—Continued
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Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)	 (S	Dwellings with basements Standard criteria)		Small commercial buildings (Standard criteria)			
	 	I Rating class and limiting features 	 Value 	Rating class and limiting features	I Value 	Rating class and limiting features 	Value 		
14:	i I	· 	I	 	 	 	i		
Ester	. 70 	IVery limited I Depth to I permafrost I Slope I Depth to	 1.00 1.00 1.00	IVery limited I Depth to I permafrost I Slope I Depth to	 1.00 1.00 1.00	Very limited Depth to permafrost Slope Depth to	 1.00 1.00 1.00		
	 	saturated zone Content of organic matter	 1.00 	 Separate zone saturated zone Depth to soft bedrock 	 0.99 	Saturated zone Content of organic matter	 1.00 		
15: ster	 75 	 Very limited Depth to permafrost Slope Depth to	 1.00 1.00 1.00	 Very limited Depth to permafrost Slope Depth to	 1.00 1.00 1.00	 Very limited Depth to permafrost Slope Depth to	 1.00 1.00 1.00		
10	 	 saturated zone Content of organic matter 	 1.00 	 saturated zone Depth to soft bedrock 	 0.99 	 saturated zone Content of organic matter 	 1.00 		
16: Fairbanks	 . 80 	I INot limited I		 Not limited 		 Somewhat limited Slope 	 0.12 		
17: Fairbanks	 . 80 	 Somewhat limited Slope 	 0.16 	 Somewhat limited Slope 	 0.16 	 Very limited Slope 	 1.00 		
18: Fairbanks	 . 70 	l IVery limited I Slope I	 1.00 	 Very limited Slope 	 1.00 	l IVery limited I Slope I	 1.00 		
19: Fairbanks	 . 80 	l IVery limited I Slope I	 1.00 	 Very limited Slope 	 1.00 	l IVery limited I Slope I	 1.00		
20: Fairbanks	 . 85 	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 		
21: Fairbanks, strongly sloping	 60 	 Somewhat limited Slope 	 0.16 	l ISomewhat limited I Slope	 0.16 	l IVery limited I Slope I	 1.00		
Fairbanks, steep	. 30 	IVery limited Slope 	 1.00 	IVery limited Slope 	 1.00 	IVery limited Slope	 1.00 		
22: Fairbanks	1	l IVery limited Slope 	 1.00 	 Very limited Slope 	 1.00 	l IVery limited I Slope I	 1.00 		
Steese	. 30 	IVery limited Slope 	 1.00 	IVery limited Slope Depth to soft bedrock 	 1.00 0.20 	IVery limited Slope 	 1.00 		
23: Fairbanks	 . 40 	l IVery limited I Slope I	 1.00 	 Very limited Slope 	 1.00 	l IVery limited I Slope I	 1.00 		
Steese	. 30 	IVery limited Slope	 1.00 	Very limited Slope Depth to soft bedrock	 1.00 0.20 	IVery limited I Slope I	 1.00 		

	Pct of	Dwellings without basements		Dwellings with basements		commercial ouildings	
	map unit	I (Standard criteria)	 (S	Standard criteria)	l (Sta	andard criteria)	
	 	I Rating class and I limiting features	Value 	Rating class and limiting features		l Rating class and l limiting features	IValue I
124: Fubar	 50 	I IVery limited I Flooding I	 1.00 	I IVery limited I Flooding I Depth to I saturated zone		 Very limited Flooding 	 1.00
Piledriver	40 	IVery limited Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00 	IVery limited Ponding I Flooding Depth to I saturated zone		IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
125: Gilmore	 80 	 Somewhat limited Depth to soft bedrock 	 1.00 	 Very limited Depth to soft bedrock 	 1.00 	 Somewhat limited Depth to soft bedrock Slope	 1.00 0.12
126: Gilmore	 70 	 Somewhat limited Depth to soft bedrock Slope	 1.00 0.16	I IVery limited I Depth to soft I bedrock I Slope	1.00	 Very limited Depth to soft bedrock Slope 	 1.00 1.00
127: Gilmore	 75 	I IVery limited I Depth to soft I bedrock I Slope I	 1.00 1.00 	I IVery limited I Depth to soft I bedrock I Slope I	 1.00 1.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00
128: Gilmore	 70 	IVery limited IVery limited IVery Slope IVery Depth to soft IVery Soft	 1.00 1.00 	I IVery limited I Slope I Depth to soft I bedrock		 Very limited Slope Depth to soft bedrock	 1.00 1.00
129: Gilmore	 85 	I IVery limited I Slope I Depth to soft I bedrock	 1.00 1.00 	I IVery limited I Slope I Depth to soft I bedrock		I IVery limited I Slope I Depth to soft I bedrock	 1.00 1.00
130: Gilmore	 85 	 Very limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope Depth to soft bedrock 	 1.00 1.00
131: Gilmore	 40 	I IVery limited I Depth to soft I bedrock I Slope	 1.00 1.00	I IVery limited I Depth to soft I bedrock I Slope	 1.00 1.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00
Ester	 40 	IVery limited I Depth to permafrost Slope Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00 	I Very limited I Depth to I permafrost I Slope I Depth to I saturated zone I Depth to soft I bedrock	1.00 1.00 1.00 0.99	I Depth to I Depth to I permafrost I Slope I Depth to I saturated zone I Content of I organic matter	

Table 14.	Building S	Site Developm	ent: Structures-	-Continued
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Map symbol and soil name	 Pct of	Dwellings without basements		Dwellings with basements		Small commercial buildings		
	map unit	I (Standard criteria)	 (S	tandard criteria)	l (Sta	andard criteria)		
	 	Rating class and limiting features	Value 	l Rating class and l limiting features	Value	l Rating class and l limiting features	Value 	
132:		 		 	I I	 		
Gilmore	65 	Somewhat limited Depth to soft bedrock		IVery limited Depth to soft bedrock	1.00	Very limited Depth to soft bedrock	 1.00 	
	1			1	I	Slope 	1.00 	
Steese	33 	INot limited I I		ISomewhat limited Depth to soft bedrock		IVery limited Slope 	 1.00 	
133: Caldetream		 Von/limited		 /on/limited	i	' /on/limited		
Goldstream	 	IVery limited Depth to permafrost Ponding	I	IVery limited Depth to permafrost Ponding	1.00 	IVery limited Depth to permafrost Ponding	 1.00 1.00	
	 	Depth to saturated zone	1.00 	Depth to saturated zone 	1.00 	Depth to saturated zone 	1.00 	
134: Goldstream	 80	l IVery limited		l IVery limited	I	l IVery limited	1	
		Depth to permafrost	I	Depth to	1.00 	Depth to permafrost	1.00 	
	 	PondingDepth tosaturated zone		PondingDepth tosaturated zone		 Ponding Depth to saturated zone 	1.00 1.00 	
	i I		i i			Slope	0.12 	
135: Goldstream	 . 50	l IVery limited		IVery limited	I	l IVery limited		
	1	Depth to		Depth to	11.00	Depth to	1.00	
	i	Ponding		Ponding	1.00	Ponding	 1.00	
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00 	
Histels	 . 45	l IVery limited		I IVery limited	I	IVery limited	I	
	1	Depth to		Depth to		Depth to	1.00	
	i	permafrost Ponding		permafrostPonding		permafrost Ponding	1.00	
	I	Subsidence		Subsidence	1.00	Subsidence	1.00	
	1	Depth to	1.00 	Depth to	1.00 	Depth to	1.00	
	1	 saturated zone Content of 	•	 saturated zone Content of 	1.00	 saturated zone Content of 	1.00	
136:	 	l organic matter		l organic matter	1	l organic matter		
Histels	. 90	IVery limited	1	Very limited		Very limited		
	I	Depth to	1.00	Depth to		Depth to	1.00	
	1	permafrost		permafrost		permafrost		
	1	Ponding Subsidence		PondingSubsidence	1.00 1.00	Ponding Subsidence	1.00 1.00	
	i	Depth to		Depth to		Depth to	1.00	
	I	saturated zone	I	saturated zone	I	saturated zone	I.	
		Content of organic matter	1.00 	Content of organic matter	1.00 	Content of organic matter	1.00 	
137:					I	 		
Jarvis	75	Very limited	1	Very limited		Very limited	Í.	
	1	Ponding		Ponding		l Ponding	1.00	
	1	Flooding		Flooding		Flooding	1.00	
	1	 Depth to saturated zone 		Depth tosaturated zone	11.00	 Depth to saturated zone 	11.00	
	i		i		i		ļ	

Map symbol and soil name	Pct of	l of l basements		Dwellings with basements		Small commercial buildings			
	map unit 	l I (Standard criteria)	(\$	Standard criteria)	l (Standard criteria)				
		Rating class and l limiting features	Value 	l Rating class and l limiting features	I Value	Rating class and limiting features 	IValue I		
38:			 				 		
arvis	55 	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00 	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00		
Chena	35	Very limited Flooding	 1.00	lVery limited I Flooding	 1.00	Very limited	11.00		
39:	i	i	i	İ	i	i	i		
larvis	45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00		
Salchaket	45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00		
			I		i		I		
40: _emeta	 	I IVery limited I Depth to I permafrost I Ponding I Subsidence	 1.00 1.00 1.00	 Very limited Depth to permafrost Ponding Subsidence	 1.00 1.00 1.00	 Very limited Depth to permafrost Ponding Subsidence	 1.00 1.00 1.00		
		 Flooding Depth to saturated zone 	1.00 1.00 	Flooding Depth to saturated zone	1.00 1.00 	 Flooding Depth to saturated zone 	1.00 1.00 1.00		
41: .iscum	 50	l IVery limited		l IVery limited		I Very limited			
		 Ponding Flooding Depth to saturated zone 	1.00 1.00 1.00 	 Ponding Flooding Depth to saturated zone 	1.00 1.00 1.00 	 Ponding Flooding Depth to saturated zone 	1.00 1.00 1.00 		
Noonku	45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	 Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 		
42:	1		1		1				
Minto	80 	Very limited Depth to saturated zone 	 1.00 	IVery limited I Depth to I saturated zone I	 1.00 	IVery limited Depth to saturated zone 	 1.00 		
43: ⁄linto	 70 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 		
44:						Slope 	0.12 		
44. Minto	60	I IVery limited I Depth to	 1.00	I IVery limited Depth to	 1.00	IVery limited Depth to	11.00		
		 saturated zone Slope 	l 0.04 l	 saturated zone Slope 	l 0.04 l	 saturated zone Slope 	 1.00		

Table 14. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map	Dwellings without		Dwellings with basements	Sma 	ll commercial buildings		
	l unit	l (Standard criteria)	(S	tandard criteria)	I (Standard criteria)			
	i	l Rating class and l limiting features	Value 	Rating class and limiting features 	Value	Rating class and limiting features	IValu I	
45:	 	 	 	 	I I	 	 	
Vinto	45 	IVery limited I Depth to I saturated zone	 1.00 	Very limited Depth to saturated zone	 1.00 	Very limited Depth to saturated zone	 1.00 	
Chatanika	 	 Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99 	I IVery limited I Ponding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 0.99 	 Very limited Ponding Depth to saturated zone Depth to permafrost	 1.00 1.00 0.99 	
46: Minto	 40 	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone Slope	 1.00 0.12	
Chatanika	 	 Very limited Ponding Depth to saturated zone Depth to permafrost 	 1.00 1.00 0.99 	 Very limited Ponding Depth to saturated zone Depth to permafrost 	 1.00 1.00 0.99 	 Very limited Ponding Depth to saturated zone Depth to permafrost Slope 	 1.00 1.00 0.99 0.12 	
47: Minto	 45 	 Very limited Depth to saturated zone Slope	 1.00 0.04	 Very limited Depth to saturated zone Slope	 1.00 0.04	 Very limited Depth to saturated zone Slope	 1.00 1.00	
Chatanika	 40 	 Very limited Ponding Depth to saturated zone Depth to permafrost Slope 	 1.00 1.00 0.99 0.04	 IVery limited Ponding Depth to saturated zone Depth to permafrost Slope 	 1.00 1.00 0.99 0.04 	Very limited Vory limited Ponding Depth to saturated zone Slope Depth to permafrost	 1.00 1.00 1.00 0.99 	
48: Minto	 45 	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	l IVery limited I Slope	 1.00	
	İ	Slope 	1.00 	Slope	1.00 	l Depth to saturated zone	1.00 	
Chatanika	 40 	 Very limited Ponding Depth to saturated zone	 1.00 1.00	 Very limited Ponding Depth to saturated zone	 1.00 1.00 	 Very limited Slope Ponding 	 1.00 1.00 	
		Depth to permafrost Slope 	10.99 1 10.63 1	Depth to permafrost Slope 	10.99 1 10.63 1	 Depth to saturated zone Depth to permafrost 	1.00 0.99 	
49: Mosquito	 	 Very limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92	I Very limited Ponding I Flooding Depth to I saturated zone Depth to I permafrost	 1.00 1.00 1.00 0.92 	 Very limited Ponding Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92	

and soil name	Pct of	Dwellings without	1	Dwellings with basements		l commercial buildings		
	map unit 			l (Standard criteria)		l I (Standard criteria)		
	 	l Rating class and l limiting features	Value 	Rating class and limiting features	Value	I Rating class and I limiting features	Valu 	
50:	 	 	 	' 	' 	· 	! 	
Mosquito	45	Very limited	I	Very limited	I	IVery limited	1	
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00	
	1	Flooding	11.00	Flooding	1.00	Flooding	1.00	
	1	 Depth to saturated zone 	11.00	Depth tosaturated zone	11.00	 Depth to saturated zone 	1.00	
	i	Content of	1.00	Depth to	10.92	Content of	1.00	
	i	organic matter		permafrost	1	l organic matter		
		Depth to	10.92 I	. 		Depth topermafrost	10.92 I	
Noonku	 40	l IVery limited	i	l IVery limited	i	l IVery limited	i	
V0011Ku		Ponding	, 1.00	Ponding	1.00	Ponding	1.00	
	i	Flooding	1.00	Flooding	11.00	Flooding	1.00	
	I	Depth to	1.00	Depth to	1.00	Depth to	1.00	
		saturated zone	1	saturated zone		saturated zone		
51: Noonku	 80	l IVery limited	Ì	l IVery limited	I	l IVery limited	Ì	
	1	Ponding	, 1.00	Ponding	1.00	Ponding	1.00	
	i	Flooding	11.00	Flooding	11.00	Flooding	1.00	
	I	Depth to	1.00	Depth to	1.00	Depth to	1.00	
		<pre>saturated zone</pre>		saturated zone	1	saturated zone		
52: North Pole		l IVery limited	Ì	l IVery limited	Ì	l IVery limited	l	
		Ponding	1.00	Ponding	1.00	Ponding	1.00	
	I	Flooding	1.00	Flooding	1.00	Flooding	1.00	
	I	Depth to	1.00	Depth to	1.00	Depth to	1.00	
		<pre>saturated zone</pre>		saturated zone		<pre>saturated zone</pre>		
53: North Pole	 50	l IVery limited	l	l IVery limited	I	l IVery limited		
		Ponding	1.00	Ponding	1.00	Ponding	1.00	
	Ì	Flooding	11.00	Flooding	1.00	Flooding	1.00	
		 Depth to saturated zone 	1.00	Depth tosaturated zone	1.00	Depth tosaturated zone	1.00	
		1		L		1		
Mosquito	130	Very limited	1 00	Very limited	1	IVery limited		
	1	Ponding Flooding	1.00 1.00	Ponding Flooding	1.00 1.00	Ponding Flooding	1.00 1.00	
	1	Depth to	11.00	Depth to	11.00	Depth to	11.00	
	i	saturated zone		saturated zone	1	saturated zone		
	I	Content of	1.00	Depth to	10.92	Content of	1.00	
	I	l organic matter	I I	permafrost	I	l organic matter	1	
	 	Depth to permafrost	10.92 I			Depth to permafrost	0.92 	
Liscum	 20	l IVery limited	I	l IVery limited	I	l IVery limited		
	1	Ponding	11.00	Ponding	1.00	Ponding	11.00	
	I	Flooding	1.00	Flooding	1.00	Flooding	1.00	
		Depth to saturated zone	1.00	Depth tosaturated zone	1.00	Depth tosaturated zone	1.00	
F 4.								
54: North Pole	55	IVery limited		I IVery limited		I IVery limited		
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00	
	1	Flooding	1.00	Flooding	1.00	Flooding	1.00	
	1	Depth to saturated zone	1.00 	Depth to saturated zone	1.00 	Depth tosaturated zone	1.00 	
Noonku	 25	l IVery limited	l I	l Very limited		l IVery limited		
	I	Ponding	1.00	Ponding	1.00	Ponding	1.00	
	l	Flooding	1.00	Flooding	1.00	Flooding	1.00	
	1	Depth to	1.00	Depth to	1.00	Depth to	1.00	
	I	saturated zone	1	saturated zone		saturated zone	I	

Map symbol and soil name	Pct of map unit	of I basements map I		Dwellings with basements Standard criteria)	l I	I Small commercial I buildings I (Standard criteria)			
	 	 Rating class and limiting features		Rating class and limiting features		I Rating class and I limiting features	IValue		
55:	I	- I 	! 	- I 	! ! !	- ' 	I 		
eede	. 85	Very limited	i	Very limited	i	Very limited	i		
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00		
	1	Flooding	1.00	Flooding	1.00	Flooding	1.00		
	!	Depth to	1.00	Depth to	1.00	Depth to	1.00		
	1	l saturated zone	1	saturated zone	1	saturated zone	1		
56:	i	i	i	i	i		i		
eede	. 70	Very limited	I.	Very limited	I	Very limited	l l		
	1	Ponding	1.00	Ponding	11.00	Ponding	1.00		
	!	Flooding	11.00	Flooding	1.00	Flooding	1.00		
	1	 Depth to saturated zone 	11.00	 Depth to saturated zone 	11.00	<pre>I Depth to I saturated zone</pre>	1.00		
	i		i		i				
losquito	. 25	Very limited	I.	Very limited	I.	Very limited	l		
	!	Ponding	11.00	Ponding	1.00	Ponding	1.00		
	1	Flooding	1.00	Flooding	11.00	Flooding	11.00		
		<pre>I Depth to I saturated zone</pre>	11.00	 Depth to saturated zone 	1.00 	 Depth to saturated zone 	1.00		
	i	Content of	1.00	Depth to	10.92	Content of	1.00		
	i	l organic matter	1	permafrost	10.52	l organic matter			
	Ì	Depth to	10.92	1	Ì	Depth to	0.92		
	1	permafrost	I	1	I	permafrost	1		
57:		1		1					
iledriver	. 75	Very limited	i	Very limited	i	Very limited	i		
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00		
	I	Flooding	1.00	Flooding	1.00	Flooding	1.00		
	1	Depth to	11.00	Depth to	1.00	Depth to	1.00		
		saturated zone		saturated zone		saturated zone			
58:	i	Ì	i	Ì	Ì	· 	İ		
iledriver	. 50	Very limited	I.	Very limited	1	IVery limited	1		
	1	Ponding	1.00	Ponding	1.00	Ponding	1.00		
		Flooding	11.00	Flooding	11.00	Flooding	11.00		
	i	<pre>I Depth to I saturated zone</pre>	1.00 	 Depth to saturated zone 	11.00	<pre>I Depth to I saturated zone</pre>	1.00		
	i	1	i		i	1	i		
ielson	. 35	IVery limited		IVery limited		IVery limited			
	1	Ponding	11.00	Ponding	11.00	Ponding	11.00		
	ł	 Flooding Depth to 	1.00 1.00	FloodingDepth to	1.00 1.00	 Flooding Depth to 	1.00 1.00		
	i	saturated zone		saturated zone		saturated zone			
	!	1	1	1					
59: 'iledriver	. 50	I IVery limited	1	l IVery limited	1	l IVery limited			
-	1	Ponding	11.00	Ponding	1.00	Ponding	1.00		
	I	Flooding	1.00	Flooding	1.00	Flooding	1.00		
	!	Depth to	1.00	Depth to	11.00	Depth to	1.00		
	1	<pre>saturated zone</pre>	1	<pre>saturated zone</pre>	1	saturated zone			
ubar	. 40	IVery limited	i	IVery limited	i i	IVery limited			
	1	Flooding	1.00	Flooding	1.00	Flooding	1.00		
	1	1	I	Depth to	10.35				
	1	1		saturated zone		1			
0:	İ		Ì	1		i			
ts, gravel	. 100	Not rated	1	Not rated	1	Not rated	ļ		
	1	1	1	1	1	1			
	i	i	i	i	i	i			
		 Net rote -	1	 Net voto =		 N at voto =			
its, quarry	.1100	INot rated	1	INot rated	1	Not rated			
	i	I	i	I	ľ	i	i i		
2:	I	1	I	1	I	1	l		
iverwash	. 100	Not rated		Not rated	1	Not rated			
	1	1	1	1	1	I	1		

Map symbol and soil name	I Pct I Dwellings without I of I basements I map I I unit I (Standard criteria)			Dwellings with basements	Sma 	ll commercial buildings	
			I (Standard criteria)		 (St	I (Standard criteria)	
	 	I Rating class and I limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	IValu I
163:	 	_ ' 		·	; 	 	!
Salchaket	85 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00 	IVery limited Ponding I Flooding Depth to saturated zone	 1.00 1.00 1.00 	IVery limited Ponding I Flooding Depth to saturated zone	 1.00 1.00 1.00
64:			i		i		i
Salchaket	45 	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00
Typic Cryorthents	 40 	l Very limited I Flooding	 1.00	Very limited Flooding	 1.00	IVery limited I Flooding	 1.00
165:	i			l I			i
Saulich	80 	IVery limited Ponding Depth to saturated zone	 1.00 1.00 	IVery limited Ponding Depth to saturated zone	 1.00 1.00 	IVery limited Ponding Depth to saturated zone	 1.00 1.00
	 	Content of organic matter Depth to permafrost 	1.00 0.99 	Content of organic matter Depth to permafrost	1.00 0.99 	 Content of organic matter Depth to permafrost Slope 	1.00 0.99 0.12
166:							
Saulich	80 	Very limited Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16 	IVery limited I Ponding I Depth to I saturated zone I Content of I organic matter I Depth to I permafrost I Slope I	 1.00 1.00 1.00 0.99 0.16 	Very limited Ponding Depth to saturated zone Content of organic matter Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99
167:	 75		i		i		i
Saulich	75 	Very limited Ponding Depth to saturated zone I content of organic matter	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Content of organic matter	 1.00 1.00 1.00	IVery limited I Slope I Ponding I I Depth to I saturated zone	 1.00 1.00 1.00
	l	Slope	1.00	Slope	1.00	Content of	1.00
	 	l I Depth to I permafrost I	 0.99 	 Depth to permafrost 	 0.99 	 organic matter Depth to permafrost 	 0.99
168: Osulist		 }	Ì	 	Ì	 	Ì
Saulich	40 	IVery limited I Ponding I Depth to I saturated zone I Content of I organic matter I Depth to I permafrost	 1.00 1.00 1.00 0.99 	IVery limited I Ponding I Depth to I saturated zone I Content of I organic matter I Depth to I permafrost	 1.00 1.00 1.00 0.99 	IVery limited I Ponding I Depth to I saturated zone I Content of I organic matter I Depth to I permafrost I Slope	 1.00 1.00 1.00 0.99 0.88
Minto	 40 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	I IVery limited I Depth to I saturated zone	 1.00
	I	Slope	10.04	Slope	0.04	Slope	1.00

Table 14	. Building	Site Development:	Structures-	-Continued
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Map symbol and soil name	Pct of	Dwellings without	Dwellings with basements (Standard criteria)			Small commercial buildings (Standard criteria)		
	map unit	l (Standard criteria)			l (Sta			
		l Rating class and l limiting features	Value Value	Rating class and limiting features	I Value	l Rating class and l limiting features	IValue	
69:	 	 	 	' 	 	' 	! 	
Saulich	40 	IVery limited Ponding Depth to saturated zone	 1.00 1.00 	IVery limited Ponding Depth to saturated zone	1.00 1.00 	IVery limited Slope Ponding 	 1.00 1.00 	
		Content of organic matter Slope	1.00 1.00	Content oforganic matterSlope	1.00 1.00	 Depth to saturated zone Content of 	1.00 1.00	
		l I Depth to I permafrost	 0.99 	 Depth to permafrost	 0.99 	I organic matter I Depth to I permafrost	 0.99 	
Minto	 35 	l IVery limited I Depth to I saturated zone	 1.00 	I IVery limited Depth to saturated zone		l IVery limited Slope 	 1.00	
		Slope 	1.00 	Slope 	1.00 	Depth to saturated zone 	1.00 	
170: Steese	 80 	 Not limited 		I ISomewhat limited I Depth to soft I bedrock		 Somewhat limited Slope 	 0.12 	
71: Steese	 80 	 Somewhat limited Slope 	 0.16 	Somewhat limited Depth to soft bedrock Slope		 Very limited Slope 	 1.00	
172: Steese	 	 Very limited Slope 	 1.00 	I IVery limited I Slope I Depth to soft I bedrock		 Very limited Slope 	 1.00	
173: Steese	 	 Very limited Slope 	 1.00 	I IVery limited I Slope I Depth to soft I bedrock		 Very limited Slope 	 1.00	
174: Steese	 	 Very limited Slope 	 1.00 	I Very limited I Slope I Depth to soft I bedrock	 1.00 0.20 	 Very limited Slope 	 1.00	
75: Steese	 	 Very limited Slope 	 1.00 	Very limited Slope Depth to soft bedrock		 Very limited Slope 	 1.00 	
76: Steese	 55 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope 	 1.00 	
Gilmore	 25 	 Very limited Depth to soft bedrock	 1.00 	I IVery limited I Depth to soft I bedrock	1.00 	 Very limited Slope 	 1.00	
		Slope 	1.00 	Slope 	1.00 	Depth to softbedrock	1.00 	

Map symbol and soil name	Pct Dwellings without of basements map I unit (Standard criteria)			Dwellings with basements standard criteria)		I Small commercial buildings I (Standard criteria)		
	 	Rating class and limiting features		Rating class and limiting features	III Value	Rating class and limiting features	IValue I	
	I I	_ I I	I			I	I I	
177: Steese	 50 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope 	 1.00 	
Gilmore	 40 	 Very limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope Depth to soft bedrock	 1.00 1.00 	
178: Steese	 50 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope 	 1.00 	
Gilmore	 40 	 Very limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock	1.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00 	
179: Steese	 45 	 Very limited Slope 	 1.00 	 Very limited Slope Depth to soft bedrock		 Very limited Slope 	 1.00 	
Gilmore	 45 	 Very limited Slope Depth to soft bedrock	 1.00 1.00 	 Very limited Slope Depth to soft bedrock	1.00 1.00	 Very limited Slope Depth to soft bedrock	 1.00 1.00	
180: Tanacross	 90 	I Very limited I Depth to I permafrost I Ponding I Flooding I Depth to I saturated zone I Subsidence	 1.00 1.00 1.00 1.00 1.00	I IVery limited I Depth to I permafrost I Ponding I Flooding I Depth to I saturated zone I Subsidence	1.00 1.00 1.00	 Very limited Depth to permafrost Ponding Flooding Depth to saturated zone Subsidence	 1.00 1.00 1.00 1.00 1.00	
181: Tanana	 75 	I Very limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 1.00 0.86 	IVery limited Ponding I Flooding Depth to I saturated zone Depth to I permafrost	1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 0.86	
182: Tanana	 60 	Very limited Ponding Flooding Depth to saturated zone Depth to permafrost	 1.00 1.00 1.00 1.00 0.86 	I IVery limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	1.00 1.00 1.00 	IVery limited I Ponding I Flooding I Depth to I saturated zone I Depth to I permafrost	 1.00 1.00 1.00 0.86 	

	Pct of map	Dwellings without basements			I Small commercial I buildings		
	l unit	l (Standard criteria)			l (Sta	l (Standard criteria)	
	 	Rating class and I limiting features	Value 	I Rating class and I limiting features	Value 	Rating class and limiting features 	IValue I
182:	 	 		 		 	
Mosquito	20 	IVery limited Ponding I Flooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92	IVery limited Ponding Flooding Depth to Saturated zone Depth to permafrost	1.00 1.00 	Very limited Ponding Hooding Depth to saturated zone Content of organic matter Depth to permafrost	 1.00 1.00 1.00 1.00 0.92
183: Typic Cryaquents	 30 	I Very limited Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00	I IVery limited I Ponding I Flooding I Depth to I saturated zone		I IVery limited I Ponding I Flooding I Depth to I saturated zone	 1.00 1.00 1.00
Histic Cryaquepts	 25 	 Very limited Ponding Depth to saturated zone	 1.00 1.00 	 Very limited Ponding Depth to saturated zone		 Very limited Ponding Depth to saturated zone	 1.00 1.00
Terric Cryofibrists	 20 	 Very limited Ponding Subsidence Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00	 IVery limited Ponding Subsidence Depth to saturated zone 	1.00 1.00 	 Very limited Ponding Subsidence Depth to saturated zone Content of organic matter	 1.00 1.00 1.00 1.00
184: Typic Cryorthents	 80 	I IVery limited I Flooding	 1.00	I IVery limited I Flooding	 1.00	I IVery limited I Flooding	 1.00
185: Typic Cryorthents, fill	 45 	l I IVery limited I		 Very limited 		I I IVery limited I	
Urban land	 45	Flooding Not rated	1.00 	Flooding Not rated	1.00 	Flooding Not rated	1.00
186: Urban land 187: Water	 100 	I INot rated I I INot rated		I INot rated I I INot rated		 Not rated Not rated	

Table 15. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	 Pct. of	Local roads and streets	 Shallow 	excavations	
	map unit 	 (Standard criteria)	l I (Standa	rd criteria)	
	 	Rating class and limiting features	Value 	 Rating class and limiting features 	Value
101: Bolio	 75 	 Very limited: Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00 	I Very limited: I Depth to permafrost I Ponding I Depth to saturated zone	 1.00 1.00
102:	 	Subsidence Frost action 	1.00 1.00 	Cutbanks cave 	0.10
Bradway	85 	IVery limited: I Ponding Depth to saturated I zone I Frost action I Flooding Depth to permafrost	 1.00 1.00 1.00 1.00 0.80	IVery limited: I Ponding I Depth to saturated I zone I Cutbanks cave I Depth to permafrost I Flooding	 1.00 1.00 0.80 0.60
103: Chatanika	 75 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost	 1.00 1.00 1.00 0.99	 Very limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave	 1.00 1.00 0.99 0.10
104: Chatanika	 75 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost	 1.00 1.00 1.00 0.99	 Very limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave	 1.00 1.00 0.99 0.10
105: Chatanika	 80 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16	 Very limited: Ponding Depth to saturated zone Depth to permafrost Slope Cutbanks cave	 1.00 1.00 0.99 0.16 0.10
106: Chatanika	 80 	 Very limited: Ponding Depth to saturated zone Frost action Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99	 Very limited: Ponding Depth to saturated zone Slope Depth to permafrost Cutbanks cave	 1.00 1.00 1.00 0.99 0.10
107: Chatanika	 55 	IVery limited: I Ponding I Depth to saturated zone I Frost action I Depth to permafrost	 1.00 1.00 1.00 0.99	IVery limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave	 1.00 1.00 0.99 0.10
Goldstream	35 	I IVery limited: I Depth to permafrost I Ponding I Depth to saturated zone	 1.00 1.00 1.00	I IVery limited: I Depth to permafrost I Ponding I Depth to saturated zone	 1.00 1.00 1.00
	 	 Frost action 	 1.00 	 Cutbanks cave 	 0.10

Map symbol and soil name	Pct.			Shallow excavations (Standard criteria)			
		Rating class and I limiting features	Value	 Rating class and limiting features 	IValue I		
108: Chena		 Somewhat limited: Flooding	 0.40	 Very limited: Cutbanks cave	 1.00		
109: Dumps, landfill		l INot rated		I Not rated	I I I		
110: Dumps, mine		l INot rated		INot rated	i I I		
111: Eielson	 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 1.00 1.00	 Very limited: Ponding Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 1.00 0.60 		
112: Eielson	 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 11.00 1.00	 Very limited: Ponding Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 1.00 0.60		
Piledriver	 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 1.00 0.40	 Very limited: Ponding Depth to saturated zone Cutbanks cave 	 1.00 1.00 1.00 		
13: Eielson	 50 	 Very limited: Ponding Depth to saturated zone Frost action Flooding	 1.00 1.00 1.00 1.00	 Very limited: Ponding Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 1.00 0.60		
Tanana	35 35 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost Flooding	 1.00 1.00 11.00 0.86 0.40	 Very limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave 	 1.00 1.00 0.86 0.10 		
I14: Ester	 	 Very limited: Depth to permafrost Depth to saturated zone	 1.00 1.00 	 Very limited: Depth to permafrost Slope 	 1.00 1.00		
		Slope Frost action 	1.00 1.00 	Depth to saturated zone Depth to soft bedrock Cutbanks cave	1.00 0.99 0.10		
115: Ester		 Very limited: Depth to permafrost Depth to saturated zone Slope Frost action 	1.00 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Slope Depth to saturated zone Depth to soft bedrock Cutbanks cave	 1.00 1.00 1.00 0.99 0.10		

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of	Local roads and streets	Shallow excavations			
	map unit (Standard criteria)		l I (Standard criteria)			
	 	I Rating class and I limiting features	I Value	 Rating class and limiting features 	IValue I	
116: Fairbanks	 80 	 Very limited: Frost action	 1.00	 Somewhat limited: Cutbanks cave 	 0.50	
17: Fairbanks	 80 	 Very limited: Frost action Slope 	 1.00 0.16 	 Somewhat limited: Cutbanks cave Slope 	 0.50 0.16 	
18: Fairbanks	 70 	 Very limited: Frost action Slope 	 1.00 1.00	 Very limited: Slope Cutbanks cave 	 1.00 0.50	
19: Fairbanks	 80 	 Very limited: Slope Frost action	 1.00 1.00	 Very limited: Slope Cutbanks cave	 1.00 0.50	
20: Fairbanks	 85 	 Very limited: Slope Frost action 	 1.00 1.00	 Very limited: Slope Cutbanks cave 	 1.00 0.50 	
21: Fairbanks, strongly sloping	 60 	 Very limited: Frost action Slope	 1.00 0.16	 Somewhat limited: Cutbanks cave Slope 	 0.50 0.16 	
Fairbanks, steep	30 	Very limited: Slope Frost action	 1.00 1.00	IVery limited: Slope Cutbanks cave	 1.00 0.50	
22: Fairbanks	 55 	 Very limited: Frost action Slope	 1.00 1.00	l IVery limited: I Slope I Cutbanks cave	 1.00 0.50	
Steese	 30 	Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20 	
123: Fairbanks	 40 	 Very limited: Slope Frost action	 1.00 1.00	l IVery limited: I Slope I Cutbanks cave	 1.00 0.50	
Steese	 30 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20 	
24: Fubar	 50 	 Somewhat limited: Flooding 	 0.40 	 Very limited: Cutbanks cave Depth to saturated zone	 1.00 0.35 	
Piledriver	40 	 Very limited: Ponding Depth to saturated zone	 1.00 1.00 	I IVery limited: I Ponding I Depth to saturated I zone	 1.00 1.00 	
		Frost action Flooding	1.00 0.40 	Cutbanks cave	1.00 	

Table 15. Building Site Development: Site Improvements-Continued

Map symbol and soil name	Pct.	Local roads and streets	Shallov 	v excavations	
	l map l unit l	l I (Standard criteria)	l (Standard criteria)		
	i	Rating class and l limiting features	I Value	 Rating class and limiting features 	IValu
25:	 I I	 	 	 	;
Gilmore	80 	ISomewhat limited: Depth to soft bedrock	 1.00 	IVery limited: I Depth to soft I bedrock	 1.00
	i	Frost action	l0.50	Cutbanks cave	10.50
26:		 Company to at line its all		l }	į
Gilmore	170 	ISomewhat limited: Depth to soft bedrock	 1.00 	IVery limited: I Depth to soft I bedrock	 1.00
		Frost action Slope	10.50 10.16	Cutbanks cave Slope	10.50 10.16
27:					I
Gilmore	75 	IVery limited: I Depth to soft I bedrock	 1.00 	IVery limited: I Depth to soft I bedrock	 1.00
	ļ	Slope Frost action	1.00 0.50	Slope Cutbanks cave	1.00 0.50
28:	I		I		I
Gilmore	70 	IVery limited: Slope	 1.00	IVery limited: I Depth to soft I bedrock	 1.00
	i	Depth to soft	11.00	Slope	1.00
		I bedrock I Frost action	 0.50 	I Cutbanks cave	 0.50
29: Gilmore	 85	l IVery limited:	I	l IVery limited:	I
		Slope 	1.00 	Depth to soft bedrock	1.00
		Depth to soft bedrock	1.00 	Slope 	1.00
		Frost action	10.50 I	Cutbanks cave 	10.50 I
130: Gilmore	ا 85	l IVery limited:	I	l IVery limited:	I
		Slope 	1.00 	Depth to soft bedrock	1.00
	I	Depth to softbedrock	1.00 	Slope 	1.00
		Frost action	10.50 I	I Cutbanks cave	10.50 I
131: Gilmore	 40	l IVery limited:	I	l IVery limited:	I
	I	I Depth to soft bedrock	11.00	Depth to soft bedrock	1.00
		Slope Frost action	1.00 0.50	Slope Cutbanks cave	1.00 0.50
Ester		IVery limited:		IVery limited:	
		 Depth to permafrost Depth to saturated zone 	1.00 1.00 	I Depth to permafrost I Slope	1.00 1.00
	i	Slope Frost action	1.00 1.00	Depth to saturated zone Depth to soft bedrock	1.00 0.99
	i I			Cutbanks cave	10.99 10.10
I32: Gilmore	l 65	l ISomewhat limited:	I	I IVery limited:	Ì
		Depth to soft bedrock Frost action	1.00 0.50	Depth to soft bedrock	1.00 0.50
Steese		l ISomewhat limited:		I ISomewhat limited:	
	l I	Frost action 	10.50 I	Cutbanks caveDepth to soft	10.50 10.20
	I			l bedrock	I

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Pct. of	Local roads and streets	Shallow excavations			
	l map l unit	l I (Standard criteria)	a) (Stand	dard criteria)		
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value 	
133: Goldstream	 80 	l I IVery limited: I Depth to permafrost	 1.00	 Very limited: Depth to permafrost	 1.00	
		 Ponding Depth to saturated zone Frost action 	1.00 1.00 1.00 	Ponding Depth to saturated zone Cutbanks cave 	1.00 1.00 0.10 	
134: Goldstream	 	 Very limited: Depth to permafrost Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10	
135: Goldstream	50 	I IVery limited: I Depth to permafrost I Ponding I Depth to saturated zone I Frost action	 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10	
Histels	 45 	 Very limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Frost action	 1.00 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave 	 1.00 1.00 1.00 0.10 	
136: Histels		I Very limited: I Depth to permafrost I Ponding I Depth to saturated zone I Subsidence I Frost action	11.00 11.00 11.00 11.00 11.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10	
137: Jarvis		I IVery limited: I Ponding I Depth to saturated zone I Frost action I Flooding	 1.00 1.00 0.50 0.40	 Very limited: Ponding Depth to saturated zone Cutbanks cave 	 1.00 1.00 1.00	
138: Jarvis	55 	I IVery limited: I Ponding I Depth to saturated zone I Frost action I Flooding	 1.00 1.00 0.50 0.40	 Very limited: Ponding Depth to saturated zone Cutbanks cave 	 1.00 1.00 1.00 	
Chena		Somewhat limited: Flooding 	 0.40 	l Very limited: I Cutbanks cave	 1.00 	
139: Jarvis	 	I IVery limited: I Ponding I Depth to saturated zone I Frost action I Flooding	 1.00 1.00 0.50 0.40 	 Very limited: Ponding Depth to saturated zone Cutbanks cave 	 1.00 1.00 1.00 	
Salchaket		Very limited: Ponding Depth to saturated zone	 1.00 1.00 	lVery limited: I Ponding I Depth to saturated I zone	 1.00 1.00 	
		Frost action Flooding 	I0.50 I0.40 I	Cutbanks cave 	1.00 	

Map symbol and soil name	Pct.	Local roads and streets	Shallow	v excavations		
	l map l unit	l I (Standard criteria)	l I (Standard criteria)			
		Rating class and limiting features	I Value	 Rating class and limiting features 	Valu	
40:	; I I	 	i i	- ' 	' 	
_emeta	75	IVery limited:	I.	IVery limited:	I.	
		Depth to permafrost	11.00	Depth to permafrost	11.00	
	1	 Ponding Depth to saturated 	1.00 1.00	 Ponding Depth to saturated 	1.00 1.00	
	I	zone	1.00	zone		
	Ì	Subsidence	11.00	Content of organic	1.00	
		 Encode a chian		matter		
	1	Frost action	1.00	Cutbanks cave	10.10	
41:	i	i	i	i	i	
iscum	50	IVery limited:	I	IVery limited:	1	
		Ponding	11.00	Ponding	11.00	
	1	<pre>I Depth to saturated I zone</pre>	1.00 	Depth to saturated zone	1.00	
	i	Frost action	1.00	Cutbanks cave	1.00	
	I	Flooding	10.40		1	
loonku		l IVery limited:		l IVery limited:		
юопки	145 I	Ponding	1.00	Ponding	11.00	
	i	Depth to saturated	11.00	Depth to saturated	11.0	
	Ì	l zone	I	l zone	Ì	
	I	Frost action	11.00	Cutbanks cave	1.00	
	I	Flooding	11.00	Flooding	10.60	
42:	Ì	1	1		i	
/into		Very limited:	i	Very limited:	i	
	I	Depth to saturated	11.00	Depth to saturated	1.00	
	1	 zone Frost action 	 1.00	zone Cutbanks cave	 0.50	
	1		1.00		10.50	
43:	i	i	i	i	i	
/linto		IVery limited:		IVery limited:		
	I	<pre>I Depth to saturated I zone</pre>	11.00	Depth to saturated zone	1.00	
		Frost action	1.00	Cutbanks cave	10.50	
	I	1	I.	1	I.	
44: Aireta		 }		 V/a.m. line it a st		
/linto		IVery limited: Depth to saturated	1	Very limited:	1	
	1	zone	1.00	zone		
	Ì	Frost action	11.00	Cutbanks cave	0.5	
	I	Slope	0.04	Slope	10.04	
45:	1	1	1	1	1	
/into	 . 45	IVery limited:	i	IVery limited:	i	
	I	Depth to saturated	1.00	Depth to saturated	1.00	
	I	l zone				
	1	Frost action	11.00	Cutbanks cave	0.50	
Chatanika		IVery limited:	i	IVery limited:	i	
	I	Ponding	1.00	Ponding	1.00	
		Depth to saturated zone	11.00	Depth to saturated zone	1.0	
	1	 Frost action Depth to permafrost 	1.00 0.99	 Depth to permafrost Cutbanks cave 	10.99 10.10	
	i					
46:			1			
linto		Very limited:	 1.00	Very limited:	11 0	
		 Depth to saturated zone Frost action 	1.00 1.00	 Depth to saturated zone Cutbanks cave 	1.00 0.50	
	i					
Chatanika	35	IVery limited:		IVery limited:		
		Ponding	11.00	Ponding	11.00	
		 Depth to saturated zone Frost action 	1.00 1.00	 Depth to saturated zone Depth to permafrost 	1.00 0.99	
	i	Depth to permafrost	10.99	Cutbanks cave	10.33	

Map symbol and soil name	Pct.	Local roads and streets	I Shallov	v excavations	
	map unit (Standard criteria)	I (Standard criteria)	l (Standard criteria)		
	i	Rating class and limiting features	I Value	 Rating class and limiting features 	IValu
47:	; I I		 I I	 	!
Minto	45 	Very limited: Depth to saturated zone	 1.00	IVery limited: I Depth to saturated I zone	 1.00
	i I	Frost action Slope	1.00 0.04	Cutbanks cave Slope	 0.50 0.04
Chatanika	 40	l IVery limited:		l IVery limited:	
		Ponding Depth to saturated	1.00 1.00	Ponding Depth to saturated	1.00 1.00
		 zone Frost action Depth to permafrost Slope 	 1.00 0.99 0.04	 zone Depth to permafrost Cutbanks cave Slope 	 0.99 0.10 0.04
48: Vinto	 45	l I IVery limited:		l l IVery limited:	
		Depth to saturated zone	1.00 	Depth to saturated zone	1.00
	1	Frost action Slope	1.00 1.00	Slope Cutbanks cave	1.00 0.50
Chatanika	40 	 Very limited: Ponding Depth to saturated	 1.00 1.00	l IVery limited: I Ponding I Depth to saturated	 1.00
		zoneFrost actionDepth to permafrostSlope	 1.00 0.99 0.63	 zone Depth to permafrost Slope Cutbanks cave 	 0.99 0.63 0.10
49: Mosquito	 	 Vor timitod		 Vor (limited)	
wosquito		Very limited: Ponding Depth to saturated	1.00 1.00	IVery limited: I Ponding I Depth to saturated	1.00 1.00
		 zone Frost action Depth to permafrost Flooding 	 1.00 0.92 0.40	zone Depth to permafrost Cutbanks cave 	0.92 0.10
50: Mosquito		l IVery limited:	i	' I IVery limited:	i I
		 Ponding Depth to saturated zone 	1.00 1.00	 Ponding Depth to saturated zone 	1.00 1.00
		Frost actionDepth to permafrostFlooding	11.00 10.92 10.40	Depth to permafrost Cutbanks cave	0.92 0.10
Noonku	40 	l IVery limited: I Ponding	 1.00	ı IVery limited: I Ponding	 1.00
		Depth to saturated zone	1.00 	I Depth to saturated	1.00
		Frost action Flooding	1.00 1.00	Cutbanks cave Flooding 	1.00 0.60
51: Noonku	 80	l IVery limited:		' I IVery limited:	
		 Ponding Depth to saturated zone Frost action Flooding 	1.00 1.00 1.00 1.00	 Ponding Depth to saturated zone Cutbanks cave Flooding 	1.00 1.00 1.00 0.60
52: North Pole	 85	l IVery limited:		ı l IVery limited:	i
		 Ponding Depth to saturated zone Frost action Flooding 	1.00 1.00 1.00 0.40	 Ponding Depth to saturated zone Cutbanks cave 	1.00 1.00 1.00

Table 15. Building Site Development: Site Improvements-Continue	ed

Map symbol and soil name	l I Pct. I of	Local roads and streets	Shallov	v excavations	
	l map l unit	I (Standard criteria)	l (Standa	ard criteria)	
		Rating class and limiting features	I Value	 Rating class and limiting features 	Valu
53:	 			 	
North Pole	50 	Very limited: Ponding Depth to saturated	 1.00 1.00	IVery limited: I Ponding I Depth to saturated	 1.00 1.00
		zoneFrost actionFlooding	 1.00 0.40	zone Cutbanks cave 	 1.00
Mosquito	ا ا 30	I IVery limited:		I IVery limited:	1
		PondingDepth to saturatedzone	1.00 1.00	PondingDepth to saturatedzone	1.00 1.00
		 Frost action Depth to permafrost Flooding 	1.00 0.92 0.40	Depth to permafrost Cutbanks cave	i0.92 i0.10 i
_iscum		IVery limited:	1	IVery limited:	Ì
		 Ponding Depth to saturated zone 	1.00 1.00 	 Ponding Depth to saturated zone 	1.00 1.00
		Frost action Flooding	11.00 10.40	Cutbanks cave 	1.00
54: North Pole	 55	l IVery limited:		l IVery limited:	
		 Ponding Depth to saturated zone 	1.00 1.00 	 Ponding Depth to saturated zone 	1.00 1.00
		Frost action Flooding	1.00 0.40	Cutbanks cave	11.00
Noonku		I IVery limited:		IVery limited:	
		 Ponding Depth to saturated zone 	1.00 1.00	Ponding Depth to saturated zone	1.00 1.00
		Frost action Flooding	1.00 1.00	Cutbanks cave Flooding	1.00 0.60
55:				1	I
Peede	85 	IVery limited:	l 1.00	IVery limited: I Ponding	 1.00
	I	<pre>I Depth to saturated I zone</pre>	1.00 	Depth to saturatedzone	1.00
		Frost action Flooding 	1.00 1.00 	Flooding Cutbanks cave 	10.60 10.10 1
56: Peede	 70	l IVery limited:		l IVery limited:	
		 Ponding Depth to saturated zone 	1.00 1.00	 Ponding Depth to saturated zone 	1.00 1.00
		Frost action Flooding	1.00 1.00	Flooding Cutbanks cave	10.60 10.10
Mosquito	25 	l IVery limited: I Ponding	 1.00	ı IVery limited: I Ponding	 1.00
	i I	Depth to saturated zone	1.00 	I Depth to saturated	1.00
		 Frost action Depth to permafrost Flooding 	1.00 0.92 0.40 	Depth to permafrost Cutbanks cave 	10.92 10.10 1
57: Piledriver	 75	l IVery limited:	 	ı l IVery limited:	
	l	 Ponding Depth to saturated zone 	1.00 1.00	 Ponding Depth to saturated zone 	1.00 1.00
	I	Frost action Flooding	1.00 0.40	Cutbanks cave	1.00

Table 15. Building Site Development: Site	Improvements—Continued
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Map symbol and soil name	l I Pct. I of	Local roads and streets	Shallov	w excavations	
	l map l unit l	 (Standard criteria) 	l I (Standa	ard criteria)	
		Rating class and limiting features	Value	 Rating class and limiting features 	Valu
58:	: I I	 	i		 I I
Piledriver	50	Very limited:	i.	Very limited:	i
		 Ponding Depth to saturated 	1.00 1.00	Ponding Depth to saturated	1.00 1.00
		zone	1	zone	
		Frost actionFlooding	1.00 0.40	Cutbanks cave 	1.00
Eielson	ا ا 35	l IVery limited:		l IVery limited:	1
	I	Ponding	1.00	Ponding	1.00
		<pre>I Depth to saturated I zone</pre>	1.00	Depth to saturated zone	11.00
		Frost action	1.00	Cutbanks cave	11.00
	l	Flooding 	1.00 	Flooding 	10.60 I
159: Piledriver	ا ا 50	l IVery limited:	I	l IVery limited:	1
	I	Ponding	11.00	Ponding	1.00
		Depth to saturated	1.00	Depth to saturated	1.00
		 zone Frost action 	 1.00	 zone Cutbanks cave 	 1.00
	I	l Flooding	10.40		
Fubar		Somewhat limited:	i	Very limited:	i
		Flooding	10.40	 Cutbanks cave Depth to saturated 	1.00 0.35
				zone	
160:					ļ
Pits, gravel		Not rated		Not rated	ļ
161: Pits, quarry	 100	I INot rated		I Not rated	
, quarry			i		i
I62: Riverwash		l INot rated	1	l Not rated	
					ļ
I63: Salchaket	ا ا 85	IVery limited:		IVery limited:	
	I	Ponding	1.00	Ponding	1.00
		<pre>I Depth to saturated I zone</pre>	1.00	<pre>I Depth to saturated I zone</pre>	11.00
		Frost action	10.50	Cutbanks cave	11.00
	I	Flooding 	10.40 I		I I
64: Salchaket	l l 45	l IVery limited:		l IVery limited:	Ì
Culonator		Ponding	1.00	Ponding	1.00
		<pre>Depth to saturated zone</pre>	1.00	Depth to saturated	1.00
		 zone Frost action 	10.50	zone Cutbanks cave	 1.00
		Flooding	10.40		I
Typic Cryorthents		Somewhat limited:	Ì	IVery limited:	Ì
		Frost actionFlooding	10.50 10.40	Cutbanks cave 	1.00
65:	l		l		
Saulich		Very limited:	I.	Very limited:	I.
		 Ponding Depth to saturated 	1.00 1.00	 Ponding Depth to saturated 	1.00 1.00
		zone		zone	
		Frost action	11.00	Content of organic matter	11.00
		Depth to permafrost	10.99	 Depth to permafrost Cutbanks cave 	10.99 10.10
		•	1	, Satsaring Cuve	10.10

Map symbol and soil name	 Pct. of	Local roads and streets	Shallow excavations (Standard criteria)		
	l map l unit	 (Standard criteria)			
		Rating class and limiting features	I Value	Rating class and limiting features	Value
166: Saulich	 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16	 Very limited: Ponding Depth to saturated zone Content of organic matter Depth to permafrost Slope	 1.00 1.00 1.00 0.99 0.16
167: Saulich	 	I IVery limited: I Ponding I Depth to saturated zone I Frost action I Slope I Depth to permafrost	 1.00 1.00 1.00 1.00 0.99	I IVery limited: I Ponding I Depth to saturated zone I Content of organic matter I Slope I Depth to permafrost	 1.00 1.00 1.00 1.00 0.99
168: Saulich	 	 Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost 	 1.00 1.00 1.00 0.99 	 Very limited: Ponding Depth to saturated zone Content of organic matter Depth to permafrost Cutbanks cave	 1.00 1.00 1.00 0.99 0.10
Minto	 40 	 Very limited: Depth to saturated zone Frost action Slope	 1.00 1.00 0.04	 Very limited: Depth to saturated zone Cutbanks cave Slope	 1.00 0.50 0.04
169: Saulich	 40 	 Very limited: Ponding Depth to saturated zone Frost action Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99	 Very limited: Ponding Depth to saturated zone Content of organic matter Slope Depth to permafrost	 1.00 1.00 1.00 1.00 0.99
Minto	 	 Very limited: Depth to saturated zone Frost action Slope 	 1.00 1.00 1.00	 Very limited: Depth to saturated zone Slope Cutbanks cave	 1.00 1.00 0.50
70: Steese	 	 Somewhat limited: Frost action 	 0.50 	 Somewhat limited: Cutbanks cave Depth to soft bedrock 	 0.50 0.20
71: Steese	 80 	I ISomewhat limited: I Frost action I Slope I	 0.50 0.16 	 Somewhat limited: Cutbanks cave Depth to soft bedrock Slope	 0.50 0.20 0.16
72: Steese	 	I IVery limited: I Slope I Frost action I	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20
173: Steese	 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20

Table 15. Building Site Development: Site Improvements—Continued

Map symbol and soil name	l Pct. I of	Local roads and streets	Shallow excavations			
	l map l unit l	l I (Standard criteria)	I (Standard criteria)			
	i	Rating class and l limiting features	Value	 Rating class and limiting features 	Valu 	
74:	 	 	 	 	! 	
Steese	85 	IVery limited: Slope Frost action 	 1.00 0.50 	IVery limited: Slope Cutbanks cave Depth to soft bedrock 	 1.00 0.50 0.20 	
175: Steese	 90 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20	
76: Steese	 	l IVery limited: I Slope I Frost action	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20	
Gilmore	 25 	l IVery limited: I Depth to soft bedrock I Slope I Frost action	 1.00 1.00 0.50	 Very limited: Depth to soft bedrock Slope Cutbanks cave	 1.00 1.00 0.50	
77: Steese	50 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20	
Gilmore	 40 	 Very limited: Slope Depth to soft bedrock Frost action	 1.00 1.00 0.50	 Very limited: Depth to soft bedrock Slope Cutbanks cave	 1.00 1.00 0.50	
78: Steese	 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20	
Gilmore	 	 Very limited: Slope Depth to soft bedrock Frost action	 1.00 1.00 0.50	 Very limited: Depth to soft bedrock Slope Cutbanks cave	 1.00 1.00 0.50	
179: Steese	 45 	 Very limited: Slope Frost action 	 1.00 0.50 	 Very limited: Slope Cutbanks cave Depth to soft bedrock	 1.00 0.50 0.20 	
Gilmore	 45 	 Very limited: Slope 	 1.00 	 Very limited: Depth to soft bedrock	 1.00 	
		Depth to softbedrockFrost action	1.00 0.50 	Slope Cutbanks cave 	1.00 0.50 	
180: Tanacross	 90 	 Very limited: Depth to permafrost Ponding Depth to saturated zone Frost action Subsidence	 1.00 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 0.10	

	Table 15. Building Site Development: Site Improvements-Con	tinued
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Map symbol and soil name	∣ ∣Pct. ∣of	Local roads and streets	Shallow excavations				
	l map l unit	l I (Standard criteria)	a) I (Standard criteria)				
		Rating class and I limiting features	I Value	 Rating class and limiting features 	IValue		
181:	 			 	- ' 		
Tanana	75 	 IVery limited: Ponding Depth to saturated zone Frost action Depth to permafrost Flooding 	 1.00 1.00 1.00 0.86 0.40 	Very limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave 	 1.00 1.00 0.86 0.10 		
182:			i		į		
Tanana	60 	IVery limited: Ponding Depth to saturated zone Frost action Depth to permafrost Flooding	I I1.00 I1.00 I1.00 I0.86 I0.40 I	IVery limited: I Ponding I Depth to saturated zone I Depth to permafrost I Cutbanks cave I	 1.00 1.00 0.86 0.10 		
Mosquito	20 	Very limited: Ponding Depth to saturated zone Frost action Depth to permafrost Flooding	 1.00 1.00 1.00 0.92 0.40 	Very limited: Ponding Depth to saturated zone Depth to permafrost Cutbanks cave	 1.00 1.00 0.92 0.10 		
183: Typic Cryaquents		l IVery limited:		l IVery limited:	Ì		
	 	Ponding Depth to saturated zone Frost action Flooding	1.00 1.00 1.00 1.00	Ponding Depth to saturated zone Flooding Cutbanks cave	1.00 1.00 0.80 0.10		
Histic Cryaquepts	25 	 Very limited: Ponding Depth to saturated zone Frost action	 1.00 1.00 1.00	 Very limited: Ponding Depth to saturated zone Cutbanks cave	 1.00 1.00 0.10		
Terric Cryofibrists	20 	 Very limited: Ponding Depth to saturated zone Subsidence	 1.00 1.00 1.00	 Very limited: Ponding Depth to saturated zone Content of organic matter	 1.00 1.00 1.00		
		Frost action	1.00	l Cutbanks cave	 0.10		
184: Typic Cryorthents	 80 	 Somewhat limited: Frost action Flooding	 0.50 0.40	 Very limited: Cutbanks cave 	 1.00		
185: Typic Cryorthents, fill	 	 Somewhat limited: Frost action Flooding	 0.50 0.40	 Very limited: Cutbanks cave 	 1.00		
Urban land	ا 45	l INot rated	l I	l INot rated			
186: Urban land	 100	l I INot rated		l I INot rated			
187: Water	 100	I Not rated		I Not rated			

Table 15. Building Site Development:	Site Improvements—Continued
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(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct.	Septic tank absorption fields	i Se	wage lagoons		
	map unit (Alaska criteria)		l (Alaska criteria)			
		Rating class and limiting features	IValue	 Rating class and limiting features 	IValue I	
101:	 	 	_ : ! !		; 	
Bolio	. 75 	Very limited: Depth to permafrost Ponding Depth to saturated	 1.00 1.00 1.00	IVery limited: I Depth to permafrost I Ponding I Excess surface	 1.00 1.00 1.00	
		zoneDepth to bedrock	 1.00	l organic matter Depth to saturated	 1.00	
		Depth to cemented pan	 1.00 	zone Seepage 	 0.50 	
102: Bradway	 95	 Von/limited:		l I IVery limited:		
Diadway	105	Very limited: Flooding	1.00	Ponding	1.00	
	i	Ponding	11.00	Flooding	1.00	
		Depth to saturated	1.00	Seepage	1.00	
	i	Depth to bedrock	1.00	I Depth to saturated	1.00	
		Depth to cemented pan	11.00	Depth to permafrost	0.80	
03: Chatanika		 Von / limitoda	ļ	 Ven:/limited:		
Chatanika	.175	Very limited: Ponding	 1.00	IVery limited: Ponding	1.00	
		Depth to saturated	11.00	Depth to saturated	11.00	
		Depth to bedrockDepth to cemented	1.00 1.00 	Depth to permafrost	10.99 10.50	
		pan Depth to permafrost	10.99			
04:	1		1			
Chatanika	. 75	IVery limited:	I.	IVery limited:	1	
		Ponding	11.00	Ponding	1.00	
		Depth to saturatedzone	1.00 	Depth to saturated	1.00 	
		Depth to bedrockDepth to cemented	1.00 1.00	Depth to permafrost Slope	10.99 10.68	
		pan Depth to permafrost 	1 0.99	I Seepage	 0.50	
05:	İ		i		į	
Chatanika	.180	IVery limited:	11.00	IVery limited:		
		PondingDepth to saturatedzone	1.00 1.00 	Ponding Slope	1.00 1.00 	
	i	Depth to bedrock	1.00	Depth to saturated	1.00	
	Ì	Depth to cemented	1.00	Depth to permafrost	10.99	
	i I	Depth to permafrost	0.99 	Seepage 	10.50 I	
06: Chatanika	 80	I IVery limited:		l IVery limited:		
		Ponding	1.00	Ponding	1.00	
	Ì	Depth to saturated zone	11.00	Slope	1.00	
	I	Slope	11.00	Depth to saturated zone	11.00	
	I	Depth to bedrock	1.00	Depth to permafrost	10.99	
	1	Depth to cemented	1.00	l Seepage	10.50	
	1	pan	I		1	

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)	I Sewage lagoons I I I (Alaska criteria)		
		Rating class and limiting features	_ I IValue	Rating class and limiting features	Value
	_ 	_ [[- 	- I	
107: Chatanika	 55 	 Very limited: Ponding Depth to saturated	 1.00 1.00	 Very limited: Ponding Depth to saturated	 1.00 1.00
	 	 zone Depth to bedrock Depth to cemented pan 	 1.00 1.00 	 zone Depth to permafrost Seepage 	 0.99 0.50
	1	Depth to permafrost	10.99 I		I
Goldstream	35 	IVery limited: I Depth to permafrost I Ponding I Depth to saturated I zone I Depth to bedrock	 1.00 1.00 1.00 1.00	Very limited: Depth to permafrost Ponding Excess surface organic matter Depth to saturated zone	 1.00 1.00 1.00 1.00
		Depth to cemented pan	1.00 	Seepage 	0.53
108: Chena	 90	l l IVery limited: I Depth to bedrock	 1.00	 Very limited: Seepage	 1.00
	i	I Depth to cemented	1.00 	 	
		Depth to saturated zone Flooding	1.00 0.40		
109: Dumps, landfill		I Not rated		Not rated	
110: Dumps, mine	 100	I Not rated		 Not rated	
111: Eielson		l IVery limited:	i	l IVery limited:	i
		Flooding Ponding Depth to saturated	1.00 1.00 1.00	PondingFloodingDepth to saturated	1.00 1.00 1.00
	 	l zone I Depth to bedrock I Depth to cemented I pan I	 1.00 1.00 	zone Seepage 	 0.53
112: Eielson	 60	l IVery limited:	l I	l IVery limited:	
		 Flooding Ponding Depth to saturated zone 	1.00 1.00 1.00	Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
		Depth to bedrock Depth to cemented pan	1.00 1.00 	I zone I Seepage I	 0.53
Piledriver	 30 	l IVery limited: I Ponding I Depth to saturated zone I Depth to bedrock I Depth to cemented	 1.00 1.00 1.00 1.00 	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00
		pan Flooding	l 0.40	1	1

Map symbol and soil name	I Pct. I of I map I unit	Septic tank absorption fields (Alaska criteria)	I Sewage lagoons I I (Alaska criteria)		
		I I Rating class and I limiting features	I IValue I	Rating class and limiting features	Value
13: Eielson	 50	 Very limited:	 	 Very limited:	 1.00
		 I Flooding I Ponding I Depth to saturated I zone 	1.00 1.00 1.00 	 Ponding Flooding Depth to saturated zone 	1.00 1.00 1.00
		 Depth to bedrock Depth to cemented pan 	1.00 1.00 	Seepage 	10.53
Fanana	 35	l IVery limited:	1	l IVery limited:	
		Ponding Depth to saturated zone	1.00 1.00 	Ponding Depth to saturated zone	1.00 1.00
		Depth to bedrockDepth to cementedpan	1.00 1.00	Depth to permafrost Seepage	10.86 10.53
	Ì	Depth to permafrost	10.86 I		l
14: Ester	i 	I IVery limited:	i	I IVery limited:	i
		Depth to bedrock	1.00 1.00	 Depth to permafrost Depth to soft bedrock 	1.00 1.00
	ļ	 Depth to saturated zone 	1.00	Excess surface organic matter	11.00
		Slope Depth to cemented pan	1.00 1.00 	 Slope Depth to saturated zone 	1.00 1.00
15:					
Ester	75 	Very limited: Depth to permafrost Depth to bedrock	 1.00 1.00	IVery limited: I Depth to permafrost I Depth to soft	 1.00 1.00
		I Depth to saturated	 1.00	bedrockExcess surface	 1.00
	 	l zone I Slope	 1.00	 organic matter Slope 	 1.00
		Depth to cemented pan 	1.00 	Depth to saturated zone 	1.00
l 16: Fairbanks	ا ا 80	l IVery limited:		l ISomewhat limited:	
	l I	 Depth to bedrock Depth to cemented 	1.00 1.00	Slope Seepage	10.68 10.53
		pan Depth to saturated zone	 1.00 		
117:	 	1		 	l I
Fairbanks	80 	IVery limited: I Depth to bedrock	 1.00	IVery limited: I Slope	 1.00
	 	I Depth to cemented I pan	1.00 	Seepage 	10.53 I
		Depth to saturated zone	1.00 		
		Slope 	0.16 		
118: Fairbanks		l IVery limited:		l IVery limited:	
	l I	 Slope Depth to bedrock 	1.00 1.00	Slope Seepage	1.00 0.53
	1	Depth to cemented pan	1.00 		l
	I	Depth to saturated	1.00	1	1

Map symbol and soil name	Pct. of map	Septic tank absorption fields	Sewage lagoons ((Alaska criteria)		
	l unit	I (Alaska criteria)			
		Rating class and limiting features	Value 	I Rating class and I limiting features	IValue I
19:	 I		- : I I	 	i
Fairbanks	80	IVery limited:	1	IVery limited:	I
		 Slope Depth to bedrock 	11.00	Slope	11.00
		Depth to cemented	1.00 1.00	Seepage	10.53
	i	pan	I	i	i
	l	<pre>I Depth to saturated I zone</pre>	1.00 	 	
20:					
Fairbanks	85	IVery limited:	 1.00	IVery limited: I Slope	 1.00
		Depth to bedrock	11.00	Seepage	10.53
	I.	Depth to cemented	1.00		I
	1	pan			
		Depth to saturated zone	1.00 		
21: Fairbanks, strongly	 60	 Very limited:		' I IVery limited:	
sloping			i		i
	1	Depth to bedrock	11.00	Slope	1.00
		Depth to cemented pan	1.00 	Seepage	10.53
	i	Depth to saturated	1.00	i i	i
		zone			
		Slope	10.16		
Fairbanks, steep	30	IVery limited:	i	IVery limited:	i
		Slope	11.00	Slope	1.00
		Depth to bedrock	1.00 1.00	Seepage	10.53
		I Depth to cemented pan			
	l I	Depth to saturated zone	1.00 	1	
22:	 				
Fairbanks	55	IVery limited:	 1.00	IVery limited: Slope	 1.00
	i	Depth to bedrock	11.00	Seepage	10.53
	I	Depth to cemented	1.00		I
		<pre> pan Depth to saturated</pre>			
		Depth to saturated zone	1.00 		
Steese	30	I IVery limited:	1	IVery limited:	
	1	Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	11.00	Slope	1.00
		 Depth to cemented pan Depth to saturated zone 	1.00 1.00	Seepage 	1.00
23: Fairbanks	 40	l I IVery limited:		ı I IVery limited:	
andanks	140	Slope	1.00	Slope	1.00
	Ì	Depth to bedrock	11.00	Seepage	10.53
	 	 Depth to cemented pan Depth to saturated zone 	1.00 1.00		
Steese	 30	l IVery limited:	1	l IVery limited:	
	1	Depth to bedrock	1.00	Depth to soft	1.00
	1			bedrock	
	1	 Slope Depth to cemented pan 	1.00 1.00	Slope Seepage	1.00 1.00
	•	Depth to saturated zone	11.00		

and soil name	Pct. of map unit	l of l absorption fields I map l		I Sewage lagoons I I (Alaska criteria)		
		l Rating class and l limiting features	I IValue I	Rating class and limiting features	Value 	
124:	! !	_ I I I	 	- <u> </u> 	! 	
Fubar	50 	Very limited: Depth to saturated zone	 1.00	IVery limited: I Seepage	 1.00	
	I	Depth to bedrock	1.00 	l Depth to saturated	0.17 	
		Depth to cemented	1.00 			
Dila dui can		Flooding //	0.40 	 Mana Basha da		
Piledriver	1 40 	Very limited: Ponding Depth to saturated	 1.00 1.00	IVery limited: I Ponding I Seepage	 1.00 1.00	
		zone Depth to bedrock	 1.00	 Depth to saturated	 1.00	
	l	I Depth to cemented	 1.00	zone	I I	
		pan Flooding	l 10.40			
I25: Gilmore		l I IVery limited:		l l IVery limited:		
	 	Depth to bedrock	 1.00	Depth to soft bedrock	 1.00	
	l	I Depth to cemented	1.00 	I Seepage	1.00 	
		Depth to saturated zone	1.00 	Slope 	10.68 I	
26: Gilmore	 70	l I IVery limited:		l l IVery limited:		
		Depth to bedrock	 1.00	Depth to soft bedrock	1.00	
	l	Depth to cemented	1.00 	Slope 	1.00 	
		Depth to saturated zone	1.00 	Seepage 	1.00 	
27:		Slope 	0.16 			
Gilmore		Very limited:	 1.00	lVery limited:	 1.00	
		 Slope	 1.00	l bedrock I Slope	 1.00	
		Depth to cemented	1.00 	Seepage 	1.00 	
		Depth to saturated zone 	1.00 			
I28: Gilmore	i 170	l IVery limited:	l I	l IVery limited:	i	
		Depth to bedrock Slope	1.00 1.00	I Depth to soft bedrock	1.00 1.00	
		Depth to cemented	1.00 	Seepage 	1.00 	
		Depth to saturated zone	1.00 			
29: Gilmore	85	l IVery limited:		ı I IVery limited:		
		Depth to bedrock Slope	1.00 1.00	Depth to soft bedrock Slope	1.00 1.00	
		Depth to cemented	11.00	l Seepage	11.00	
		 pan Depth to saturated zone 	11.00			

Map symbol and soil name	Pct.	Septic tank absorption fields	l Se	wage lagoons	
	map unit	•	l (Alaska criteria)		
		Rating class and limiting features	IValue	 Rating class and limiting features 	Value
30:	!	! ! !	' 	 	!
Gilmore	l 85 I	IVery limited: I Depth to bedrock	 1.00	IVery limited: I Depth to soft	 1.00
		l I Slope I Depth to cemented	 1.00 1.00	bedrock Slope Seepage	 1.00 1.00
		 pan Depth to saturated zone 	 1.00 	 	
31:					
Gilmore	40 	IVery limited: I Depth to bedrock I	 1.00	IVery limited: I Depth to soft I bedrock	 1.00
		Slope Depth to cemented	1.00 1.00	Slope Seepage	1.00 1.00
		pan Depth to saturated zone	1.00 	 	
Ester	 40	 Very limited: Depth to permafrost	 1.00	 Very limited: Depth to permafrost	 1.00
		I Depth to bedrock	1.00 	I Depth to soft I bedrock	1.00
		Depth to saturated zone Slope	1.00 1.00	Excess surface organic matter Slope	1.00 1.00
		Depth to cemented	11.00	Depth to saturated	11.00
32: Gilmore	 65	l I IVery limited:		l I IVery limited:	
		Depth to bedrock	1.00	Depth to softbedrock	11.00
		Depth to cemented pan Depth to saturated	1.00 1.00	Seepage Slope	1.00 1.00
	I I	l zone	I		
Steese	33 	IVery limited: Depth to bedrock	1.00	IVery limited: Depth to soft	 1.00
		I I Depth to cemented I pan	1.00	l bedrock I Seepage I	 1.00
		Depth to saturated zone	1.00	Slope 	1.00
33: Goldstream	 80	ı I IVery limited:		l IVery limited:	
		 Depth to permafrost Ponding 	1.00 1.00	Depth to permafrost Ponding	1.00 1.00
	1	Depth to saturated	1.00 	Excess surface organic matter	1.00
		 Depth to bedrock Depth to cemented pan 	1.00 1.00 	Depth to saturated zone Seepage 	1.00 0.53
34: Goldstream	 80	l l IVery limited:	 	l l IVery limited:	
	I	Depth to permafrost	1.00 1.00	Depth to permafrost Ponding	1.00 1.00
	Ì	Depth to saturated	11.00	Excess surface organic matter	11.00
		Depth to bedrock Depth to cemented pan	1.00 1.00	Depth to saturated zone	1.00 0.68

Map symbol and soil name	 Pct. of map unit	Septic tank absorption fields (Alaska criteria)	I Sewage lagoons I I I (Alaska criteria)			
		I I Rating class and I limiting features	_ I IValue I	Rating class and limiting features	Valu	
135: Goldstream	 	L I IVery limited: I Depth to permafrost I Ponding I Depth to saturated zone I Depth to bedrock I Depth to cemented I pan	 1.00 1.00 1.00 1.00 1.00 	I Very limited: Depth to permafrost Ponding Excess surface organic matter Depth to saturated zone Seepage	 1.00 1.00 1.00 0.53 	
Histels	 45 	 Very limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Excess surface organic matter Depth to saturated zone Seepage	 1.00 1.00 1.00 1.00 0.50	
136: Histels	90 	 Very limited: Depth to permafrost Ponding Depth to saturated zone Subsidence Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	I Very limited: I Depth to permafrost I Ponding I Excess surface I organic matter I Depth to saturated I zone I Seepage	 1.00 1.00 1.00 1.00 0.50	
137: Jarvis	 75 	l IVery limited: I Ponding I Depth to saturated zone I Depth to bedrock I Depth to cemented pan I I Flooding	 1.00 1.00 1.00 1.00 .00	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00 	
138: Jarvis	 55 	I IVery limited: I Ponding I Depth to saturated I zone I Depth to bedrock I I Depth to cemented I pan I Flooding	 1.00 1.00 11.00 11.00 0.40	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00 	
Chena	 35 	I IVery limited: I Depth to bedrock I Depth to cemented pan I Depth to saturated zone I Flooding	 1.00 1.00 1.00 0.40	 Very limited: Seepage 	 1.00 	
139: Jarvis	45 	 Very limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan Flooding	 1.00 1.00 1.00 1.00 0.40	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00 	
Salchaket	 45 	I IVery limited: I Ponding I Depth to saturated zone I Depth to bedrock I Depth to cemented pan I Flooding	 1.00 1.00 1.00 1.00 0.40 	 Very limited: Ponding Seepage Depth to saturated zone 	 1.00 1.00 1.00 	

Map symbol and soil name	Pct. of map	Septic tank absorption fields	Sewage lagoons ((Alaska criteria)			
	l unit l (Alaska criteria)	I (Alaska criteria)				
		Rating class and limiting features	IValue	Rating class and I limiting features	Value	
40:	! 	- ' 	_ ' 	- I	I I	
_emeta	75	IVery limited:	i	IVery limited:	i	
	1	I Depth to permafrost	1.00	Depth to permafrost	1.00	
		Ponding	1.00	Ponding	1.00	
		Depth to saturated	1.00	Excess surface	1.00	
		l zone I Subsidence	1	 organic matter Seepage 	 1.00	
		Depth to bedrock	11.00	Depth to saturated	11.00	
41:	i		i		i	
iscum	50	Very limited:	i	Very limited:	i	
	1	Ponding	1.00	Ponding	1.00	
		Depth to saturated	1.00	Excess surface	1.00	
		 zone Depth to bedrock 	1	 organic matter Depth to saturated 	 1.00	
		 Depth to cemented	 1.00	zone Seepage	 0.53	
		pan Flooding	 0.40			
	i	l		i	i	
loonku	45	IVery limited:	Ι	IVery limited:	I	
		Flooding	11.00	Ponding	1.00	
		 Ponding Depth to saturated 	1.00 1.00	Flooding	1.00 1.00	
		l zone	I.	Seepage 	I.	
		Depth to bedrock	1.00 	Depth to saturated zone	1.00 	
		Depth to cemented pan	1.00 			
42:			i i			
/linto	80	IVery limited:		IVery limited:		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	
		 Massive ice possible below 6 feet, high 	11.00	 Massive ice possible below 6 feet, high 	1.00	
	i	subsidence	i	subsidence	i	
	i	potential	i	potential	i	
	1	I Depth to bedrock	1.00	l Seepage	10.53	
		I Depth to cemented I pan	1.00 			
43:			l I		l I	
/linto	70	IVery limited:		IVery limited:		
		 Depth to saturated zone Massive ice possible 	1.00 1.00	 Depth to saturated zone Massive ice possible 	1.00 1.00	
		below 6 feet, high	11.00	below 6 feet, high	11.00	
	i	subsidence	i	subsidence	i	
	1	l potential	I	l potential	I	
		Depth to bedrock	1.00	Slope	10.68	
44.		Depth to cemented pan 	1.00 	Seepage 	10.53 1	
44: ⁄linto	l 60	I IVery limited:	I I	ı IVery limited:		
	1	Depth to saturated	1.00	Slope	1.00	
	1	zone Massive ice possible	 1.00	I Depth to saturated	 1.00	
	í	below 6 feet, high		zone		
	I	subsidence	I.	I	Ì	
	1	potential	I	1	I	
	1	Depth to bedrock	1.00	Massive ice possible	1.00	
				below 6 feet, highsubsidence potential		
	1					
	1	Depth to cemented pan	1.00	Seepage	0.53	

Map symbol and soil name	Pct. of map unit	 Septic tank absorption fields (Alaska criteria) 	I Sewage lagoons I I I (Alaska criteria)		
		Rating class and Imiting features	_ I IValue I	 Rating class and limiting features 	IValu
145:	. ! 	1 	_ \ 	- I 	
Minto	45 	Very limited: Depth to saturated sone	 1.00	Very limited: Depth to saturated zone	 1.00
	 	Massive ice possible below 6 feet, high subsidence potential	1.00 	 Massive ice possible below 6 feet, high subsidence potential 	1.00
		Depth to bedrock Depth to cemented pan	1.00 1.00 	Seepage	10.53
Chatanika	1 40	IVery limited:		IVery limited:	
	1	 Ponding Depth to saturated 	1.00 1.00	Ponding Depth to saturated	1.00 1.00
	 	 zone Depth to bedrock Depth to cemented pan 	 1.00 1.00	zone Depth to permafrost Seepage	 0.99 0.50
	1	Depth to permafrost	0.99		ļ
146: Minto	 40	 \(on/limitod)	i	 Vanulimitad:	i
Minto		IVery limited: I Depth to saturated I zone	1.00	Very limited: Depth to saturated zone	1.00
		 Massive ice possible below 6 feet, high subsidence 	1.00 	Massive ice possiblebelow 6 feet, highsubsidence	1.0(
	 	 potential Depth to bedrock Depth to cemented pan 	 1.00 1.00 	potential Slope Seepage 	 0.68 0.53
Chatanika	 35 	l IVery limited: I Ponding	 1.00	l IVery limited: I Ponding	 1.0
	i I	Depth to saturated	11.00	Depth to saturated	11.0
	 	Depth to bedrock Depth to cemented	1.00 1.00	Depth to permafrost Slope	10.99 10.68
	 	Depth to permafrost	0.99	l Seepage	10.50
147: Minto	 45	l IVery limited:		l IVery limited:	i
		Depth to saturated	1.00	Slope	1.00
	 	 Massive ice possible below 6 feet, high subsidence potential 	1.00 	Depth to saturated	1.00
	 	Depth to bedrock	1.00 	 Massive ice possible below 6 feet, high subsidence 	1.00
	 	 Depth to cemented pan Slope	 1.00 0.04	potential Seepage 	 0.53
Chatanika	 40	l IVery limited:		l IVery limited:	i
		Ponding	1.00	Ponding	1.00
	1	Depth to saturated zone	11.00	Slope	11.00
	1	 Depth to bedrock Depth to cemented pan 	1.00 1.00	 Depth to saturated zone Depth to permafrost 	1.00 0.99
	i	Depth to permafrost	10.99	Seepage	10.50

Map symbol and soil name	Pct.	Septic tank absorption fields	i Se	ewage lagoons	
	map unit	l I (Alaska criteria)	l I (Ala	aska criteria)	
		Rating class and I limiting features	IValue	 Rating class and I limiting features 	Value
48:	; 	- ' 	\ 	 	\
Minto	45 	Very limited:	 1.00	IVery limited: Slope	 1.00
	 	 zone Massive ice possible below 6 feet, high 	 1.00 	I I Depth to saturated I zone	 1.00
		I subsidence potential I Slope I	 1.00 	 Massive ice possible below 6 feet, high subsidence	 1.00
		l I Depth to bedrock I Depth to cemented I pan	 1.00 1.00 	potentia Seepage 	 0.53
Chatanika	40	Very limited: Ponding Depth to saturated	 1.00 1.00	IVery limited: I Ponding I Slope	1.00 1.00
		 zone Depth to bedrock 	 1.00	I I Depth to saturated I zone	 1.00
	Ì	l Depth to cemented	1.00 	Depth to permafrost	0.99
		Depth to permafrost	10.99 I	Seepage 	10.50
49: Mosquito	 85 	I IVery limited: I Ponding I Depth to saturated I zone I Depth to bedrock	 1.00 1.00 1.00	 Very limited: Ponding Excess surface organic matter Seepage	 1.00 1.00 1.00
		Depth to cemented pan Depth to permafrost	1.00 0.92	Depth to saturated zone Depth to permafrost	1.00 0.92
50: Mosquito	 45	l I IVery limited:		l I IVery limited:	
		Ponding Depth to saturated zone	1.00 1.00 	Ponding Excess surface organic matter	1.00 1.00
	I	Depth to bedrock	1.00 1.00	 Seepage Depth to saturated 	1.00 1.00
		pan Depth to permafrost	 0.92	I zone Depth to permafrost	 0.92
Noonku	40 	IVery limited: IVery limited: I Flooding I Ponding I Depth to saturated	 1.00 1.00 1.00	 Very limited: Ponding Flooding Seepage	 1.00 1.00 1.00
		zone Depth to bedrock	 1.00	I I Depth to saturated I zone	 1.00
	i i	Depth to cemented	1.00 		
51: Noonku	 80	l l IVery limited:		l l IVery limited:	
		 Flooding Depth to saturated zone 	1.00 1.00 1.00	Ponding Flooding Seepage	1.00 1.00 1.00
	i	Depth to bedrock	1.00 	l Depth to saturated	1.00
		 Depth to cemented pan 	1.00 	1	

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		wage lagoons ska criteria)	
		I Rating class and I limiting features	_ I IValue I	 Rating class and limiting features 	IValu I
152:	 		- ' 	 	; I
North Pole	85 	IVery limited: Ponding Depth to saturated	 1.00 1.00	IVery limited: Ponding Seepage	 1.00 1.00
		I zone I Depth to bedrock I	 1.00 	I Depth to saturated	 1.00
		I Depth to cemented I pan I Flooding	1.00 0.40		
153:	i	 			i
North Pole	50	IVery limited: I Ponding	 1.00	IVery limited: I Ponding	 1.00
		Depth to saturated	1.00 	Seepage 	1.00 1.00
		I Depth to bedrock	1.00 	<pre>I Depth to saturated I zone</pre>	1.00
		Depth to cemented pan	1.00 		
	Ì	Flooding	10.40 I		Í
Mosquito	30	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00
		Depth to saturated	11.00	Excess surface	1.00
		zoneDepth to bedrock	1.00	l organic matter l Seepage	11.00
	I	Depth to cemented pan	1.00 	<pre>I Depth to saturated I zone</pre>	1.00
		I Depth to permafrost	10.92 I	Depth to permafrost 	10.92 I
Liscum	20 	IVery limited: I Ponding	 1.00	IVery limited: I Ponding	 1.00
		Depth to saturated	1.00 	Excess surface organic matter	1.00
	İ	Depth to bedrock	1.00 1.00	Depth to saturated zone Seepage	1.00 0.53
	i	Flooding	10.40		
154: North Pole	i 	I IVery limited:	i	I IVery limited:	i
	l	PondingDepth to saturated zone	1.00 1.00	Ponding Seepage	1.00 1.00
	i	Depth to bedrock	1.00 1.00	Depth to saturated zone	1.00
	I I	l I Flooding	l 10.40	 	
Noonku	25	l IVery limited:		l IVery limited:	
	I	Flooding Ponding	1.00 1.00	Ponding Flooding	1.00 1.00
		I Depth to saturated I zone	1.00 	Seepage 	1.00
		 Depth to bedrock Depth to cemented pan 	1.00 1.00	Depth to saturated zone 	1.00
155: Peede	 85	ı I IVery limited:		ı l IVery limited:	
		Flooding	1.00	Ponding	11.00
		 Ponding Depth to saturated zone 	1.00 1.00	FloodingDepth to saturated zone	1.00 1.00
	I I	 Depth to bedrock Depth to cemented 	1.00 1.00	Seepage 	0.50
	I	l pan	I	1	I

Map symbol and soil name	Pct. of map	Septic tank absorption fields	l Se l	wage lagoons	
	unit	(Alaska criteria)	i (Ala:	ska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	IValue
56:	' 	_ ' 	- ' 	' 	\
eede	70	IVery limited:	Ì	IVery limited:	Ì
	I	Flooding	11.00	Ponding	1.00
	I	 Ponding Depth to saturated 	1.00 1.00	FloodingDepth to saturated	1.00 1.00
	1	zone	1.00	zone	11.00
		Depth to bedrockDepth to cementedpan	1.00 1.00 	Seepage 	i0.50 I I
losquito	 25	l IVery limited:		l IVery limited:	
	I.	Ponding	1.00	Ponding	1.00
	I	Depth to saturated	1.00	Excess surface	1.00
	1	 zone Depth to bedrock 	 1.00	organic matterSeepage	 1.00
	i	Depth to cemented	11.00	Depth to saturated	11.00
	I.	l pan	I	l zone	I
		I Depth to permafrost	10.92 I	Depth to permafrost	10.92 1
57: Piledriver	 75	l IVery limited:	I	l IVery limited:	
		Ponding	1.00	Ponding	1.00
	I	Depth to saturated	1.00	Seepage	1.00
		 zone Depth to bedrock 	 1.00	Depth to saturated	 1.00
	1	I I Depth to cemented	 1.00	l zone	1
		l pan	I.		į
	I	Flooding 	10.40 I		
58: Piledriver	ا ا 50	l IVery limited:	l I	l IVery limited:	
	1	Ponding	1.00	Ponding	1.00
		<pre>I Depth to saturated I zone</pre>	1.00 	Seepage 	1.00
	1	Depth to bedrock	1.00 	 Depth to saturated zone 	1.00
	i	I Depth to cemented	1.00		İ
		Flooding	10.40		
Eielson	l 35	I IVery limited:	1	I IVery limited:	
	1	Flooding	1.00	l Ponding	1.00
		Ponding	1.00	Flooding	1.00
		I Depth to saturated I zone	1.00 	Depth to saturatedzone	1.00
	i	Depth to bedrock	1.00	Seepage	10.53
		I Depth to cemented I pan	1.00 		l I
59:		1	l		I I
Piledriver	50	IVery limited:		IVery limited:	
		 Ponding Depth to saturated 	1.00 1.00	Ponding Seepage	1.00 1.00
		zone Depth to bedrock	 1.00	Depth to saturated	 1.00
		1	I.	zone	
	1	I Depth to cemented I pan	1.00 		
	l	Flooding	10.40 I	1	
-ubar	40	IVery limited:		Very limited:	
		Depth to saturated zone	11.00	Seepage	1.00
	Ì	 Depth to bedrock Depth to cemented 	1.00 1.00	Depth to saturated zone	0.17
	i	l pan			i
		Flooding	0.40		

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)	 	wage lagoons ska criteria)	
		I Rating class and I limiting features	 Value 	 Rating class and limiting features 	IValu
160: Pits, gravel	 100	I I INot rated	- : 	I Not rated	- '
	1		I.	1	-
161: Pits, quarry		INot rated		l INot rated	1
162: Riverwash	 100	l INot rated		l INot rated	
163:	i		i		Ì
Salchaket	85	Very limited: Ponding	 1.00	IVery limited: I Ponding	 1.00
		Depth to saturated	11.00	I Seepage	11.00
		Depth to bedrock	1.00 	l Depth to saturated	1.00
		Depth to cemented	1.00 		1
		l pan I Flooding	0.40		
164:			ļ		į
Salchaket	45 	Very limited:	 1.00	IVery limited: I Ponding	 1.00
	İ	Depth to saturated	1.00	Seepage	11.00
		Depth to bedrock	11.00	Depth to saturated	1.00
	Ì	Depth to cemented	 1.00	l zone I	i
		l pan I Flooding	l 10.40	 	
Typic Cryorthents	 40	l IVery limited:		l IVery limited:	1
.,,	ļ	Depth to bedrock	11.00	Seepage	1.00
	Ì	 Depth to cemented pan Depth to saturated zone 	1.00 1.00	1	1
	į	Filtering capacity	10.50		i
	I	Flooding 	0.40 		I
165: Saulich	 80	l IVery limited:	1	l IVery limited:	1
	ļ	Ponding	1.00	Ponding	11.00
	1	<pre>I Depth to saturated I zone</pre>	1.00 	 Excess surface organic matter 	1.00
		 Depth to bedrock Depth to cemented 	1.00 1.00	 Seepage Depth to saturated 	1.00 1.00
	ļ	l pan	I	l zone	Ι
		Depth to permafrost	0.99 	Depth to permafrost	0.99
166: Saulich	ا 80 ا	l IVery limited:	I	l IVery limited:	I
		Ponding	1.00	Ponding Excess surface	11.00
	i	 Depth to saturated zone 	1.00 	organic matter	1.00
		 Depth to bedrock Depth to cemented pan 	1.00 1.00	Slope Seepage	1.00 1.00
	į	Depth to permafrost	10.99	Depth to saturated	11.00
				zone 	
167: Saulich	 75	l IVery limited:		l IVery limited:	
oution		Ponding	1.00	Ponding	11.00
		 Depth to saturated zone Slope 	1.00 1.00	 Excess surface organic matter Slope 	1.00 1.00
	i	Depth to bedrock	1.00	l Seepage	1.00
	I	Depth to cemented pan	11.00	<pre>I Depth to saturated I zone</pre>	1.00

Map symbol and soil name	Pct.	Septic tank absorption fields	Se	wage lagoons	
	map unit	l I (Alaska criteria)	l I (Ala	ska criteria)	
		Rating class and limiting features	IValue	 Rating class and limiting features 	Value
68:	I	_ \	 	- I 	!
Saulich		Very limited:	i	IVery limited:	i i
	1	Ponding	1.00	Ponding	11.00
	I.	Depth to saturated	1.00	Excess surface	1.00
	I	l zone	I	l organic matter	I
		Depth to bedrock	11.00	Seepage	1.00
		Depth to cemented	11.00	Depth to saturated	1.00
	1	 pan Depth to permafrost 	ا ا0.99	l zone I Slope	 1.00
	i				
Vinto	l 40	IVery limited:	I	IVery limited:	I
	I	Depth to saturated	1.00	Depth to saturated	1.00
	1	zone Massive ice possible	ا 1.00	zone Massive ice possible	 1.00
	1	below 6 feet, high	11.00	below 6 feet, high	11.00
	i	subsidence	i	subsidence	i
	Í	l potential	Ì	potential	Í
	I	I Depth to bedrock	1.00	Ślope	1.00
	I	Depth to cemented	1.00	Seepage	10.53
	1	pan Slope	ا ا0.04		
	I				i
69:	I	I	I.	1	I.
Saulich	40	IVery limited:		IVery limited:	
	1	Ponding	1.00 1.00	 Ponding Excess surface 	11.00
	1	<pre>I Depth to saturated I zone</pre>	11.00	organic matter	1.00
	i	Slope	1.00	Slope	1.00
	Ì	Depth to bedrock	11.00	Seepage	1.00
		Depth to cemented	11.00	Depth to saturated	1.00
	1	l pan	1	l zone	
Minto	35	IVery limited:	Ì	Very limited:	Í
	ļ	Depth to saturated	1.00	Slope	1.00
		zone			
	1	 Massive ice possible below 6 feet, high 	11.00	Depth to saturated zone	1.00
	i	subsidence	i		i
	I	l potential	I.	1	I
	I	Slope	1.00	Massive ice possible	1.00
	1			below 6 feet, high	
	1	1	i	l subsidence l potential	
	i	Depth to bedrock	1.00	Seepage	10.53
	I	I Depth to cemented	1.00		I
	1	l pan		1	
70:	1			1	1
Steese		Very limited:	i	IVery limited:	i
	I	Depth to bedrock	1.00	Depth to soft	1.00
	1	 Donth to comparted		bedrock	
	ł	I Depth to cemented I pan	1.00 	l Seepage	1.00
	i	Depth to saturated	11.00	l Slope	10.68
	!	l zone	1		1
71:	1			1	
Steese	80	Very limited:	i	Very limited:	i
	I	Depth to bedrock	11.00	Depth to soft	1.00
	!			l bedrock	
		Depth to cemented	11.00	Slope	1.00
	1	l pan			
	1	Depth to saturated	1 00	Seepage	11 00
		<pre>I Depth to saturated I zone</pre>	1.00 	Seepage 	1.00

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		wage lagoons ska criteria)	
		I I Rating class and I limiting features	_ I IValue I	 Rating class and limiting features 	IValu I
172: Steese	: I I I I I I I I I I I I I I I I I I I		 1.00 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
173: Steese	 	 Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
174: Steese	 	 Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
175: Steese	90 	 Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
176: Steese	 	 Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00	I IVery limited: I Depth to soft I bedrock I Slope I Seepage I	 1.00 1.00 1.00
Gilmore	 25 	 Very limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
177: Steese	50 	IVery limited: Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	 1.00 1.00 1.00 	 Very limited: Depth to soft bedrock Slope Seepage 	 1.00 1.00 1.00
Gilmore	40 	 Very limited: Depth to bedrock Slope Depth to cemented	 1.00 1.00 1.00	 Very limited: Depth to soft bedrock Slope Seepage	 1.00 1.00
		l pan l Depth to saturated l zone	 1.00		

Map symbol and soil name	Pct. of map	Septic tank absorption fields	l Se l	wage lagoons	
	l unit	i (Alaska criteria)	i (Ala	ska criteria)	
		Rating class and limiting features	IValue	Rating class and limiting features	IValue
78:	!	- ' 	- ' 	- • 	'
Steese	50	IVery limited:	1	IVery limited:	I
		Depth to bedrock Slope	1.00 1.00	 Depth to soft bedrock Slope 	11.00
	1	Depth to cemented pan	11.00	Seepage	1.00 1.00
	į	Depth to saturated zone	11.00		
ailmore	l 40	IVery limited:	I	IVery limited:	I
		Depth to bedrock	11.00	Depth to soft bedrock	11.00
		 Slope Depth to cemented 	1.00 1.00	Slope Seepage	1.00 1.00
		pan	1	l Geepage	1.00
	Ì	Depth to saturated	1.00	1	Ì
70.	į		i		i
79: Steese	45	Very limited:		IVery limited:	
		Depth to bedrock	11.00	Depth to soft bedrock	11.00
		 Slope Depth to cemented 	1.00 1.00	Slope Seepage	1.00 1.00
		pan			
		Depth to saturated zone	1.00 		
Gilmore	45	Very limited:	i	Very limited:	Ì
		Depth to bedrock	11.00	Depth to soft bedrock	11.00
	1	 Slope Depth to cemented 	1.00 1.00	Slope Seepage	1.00 1.00
	i	l pan			
		I Depth to saturated I zone	1.00 		
80:	1		I		I
Fanacross	İ 90	IVery limited:	i	IVery limited:	i
		Depth to permafrost	1.00	Depth to permafrost	11.00
		 Ponding Depth to saturated 	1.00 1.00	Ponding Excess surface	1.00 1.00
	i i	zone		l organic matter	
	I	Depth to bedrock	11.00	Depth to saturated zone	1.00
	I	I Depth to cemented pan	1.00 	Seepage 	10.53 I
81: Fanana	 75	l IVery limited:		l IVery limited:	I
i anana		Ponding	1.00	Ponding	1.00
	I	Depth to saturated	1.00	Depth to saturated	1.00
	1	zone	 1.00	zone	
		 Depth to bedrock Depth to cemented pan 	11.00	 Depth to permafrost Seepage 	10.86 10.53
	i	Depth to permafrost	10.86		
82:		 	Ì	 Van limitad	i
Tanana	1 60	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00
	i	Depth to saturated	11.00	Depth to saturated	11.00
	I	l zone	I.	l zone	
		 Depth to bedrock Depth to cemented pan 	1.00 1.00	 Depth to permafrost Seepage 	10.86 10.53
		Depth to permafrost	10.86	 	
Mosquito	ا ا 20	l IVery limited:	I	l IVery limited:	l
		PondingDepth to saturated zone	1.00 1.00	PondingExcess surface organic matter	1.00 1.00
	I	I Depth to bedrock	 1.00	 Seepage	 1.00
	I	Depth to cemented	11.00	Depth to saturated	1.00
		pan		zone	
	1	Depth to permafrost	10.92	Depth to permafrost	10.92

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		wage lagoons ska criteria)	
		Rating class and l limiting features	_ I IValue I	 Rating class and I limiting features 	IValue I
183: Typic Cryaquents	 30 	I IVery limited: I Flooding I Depth to saturated I zone I Depth to bedrock I Depth to cemented I pan	 1.00 1.00 1.00 1.00 	Very limited: Very limited: Ponding Flooding Depth to saturated zone Seepage	 1.00 1.00 0.01
Histic Cryaquepts	25 	Very limited: Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	 1.00 1.00 1.00 1.00	Very limited: I Ponding I Excess surface I organic matter I Seepage I Depth to saturated I zone	 1.00 1.00 1.00 1.00
Terric Cryofibrists	20 	Very limited: Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan	 1.00 1.00 1.00 1.00	Very limited: Ponding Excess surface organic matter Seepage Depth to saturated zone	 1.00 1.00 1.00 1.00
184: Typic Cryorthents	80 	 Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Flooding Restricted permeability	 1.00 1.00 1.00 0.40 0.31	 Very limited: Seepage 	
185: Typic Cryorthents, fill	 	IVery limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Flooding	 1.00 1.00 1.00 0.50 0.40	 Very limited: Seepage 	 1.00
Urban land	45 	I INot rated		Not rated	
186: Urban land	i 100	l INot rated		 Not rated	
87: Water	 100	l I INot rated		I I INot rated	

Table 17. Sanitary Facilities: Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	IPct. of map	l landfill		a sanitary Indfill		y cover for andfill	
	lunit		l (Stan	dard criteria)	l (Stan	idard criteria)	
		Rating class and limiting features	 Value 	Rating class and limiting features	Value 	 Rating class and limiting features 	IValu I
01:	'' 	' 	' 	' 	' 	 	. <u>.</u>
Bolio		Very limited:	i	Very limited:	i	Very limited:	i
			1.00 1.00 	 Depth to permafrost Ponding 	1.00 1.00 		1.00 1.00
	i		1.00	Depth to saturated	11.00	Depth to saturated	1.00
		l matter	 1.00 0.40	Flooding	0.40 		1.00
00.					i		į
102: Bradway	185	IVery limited:	1	Very limited:		IVery limited:	-
Diauway		Flooding	 1.00 1.00	Flooding Ponding	1.00 1.00	Ponding	1.00 1.00
	i		1	Depth to saturated zone	1.00		1.00
	i		1.00	Seepage	1.00		10.80
	I	Depth to permafrost	10.80 I	Depth to permafrost	10.80 I		10.52 I
103:			ĺ		Ì		Ì
Chatanika	/ /5 	Very limited: Depth to saturated	 1.00	Very limited: Ponding	 1.00	Very limited: Ponding	 1.00
	İ	l zone	I		Ι		1
		Ponding 	1.00 	Depth to saturatedzone	1.00 	 Depth to saturated zone 	1.00
	Ì	Depth to permafrost	10.99	Depth to permafrost	0.99		i0.99
104:	i		İ		i		i
Chatanika		Very limited: Depth to saturated	 1.00	Very limited: Ponding	1 1.00	Very limited: Ponding	 1.00
	i	zone					
	l		1.00 0.99	Depth to saturated zone	1.00 0.99	Depth to saturated zoneDepth to permafrost	1.00
			10.99	Depth to permafrost	10.99		10.99
05: Chatanika	ا 80 ا	l IVery limited:		I IVery limited:		I IVery limited:	1
onatanika		Depth to saturated	1.00	Ponding	1.00		1.00
	I	l zone l Ponding	 1.00	Depth to saturated	 1.00	Depth to saturated	 1.00
		 Depth to permafrost	 0.99	zoneDepth to permafrost	ا ا0.99	zoneDepth to permafrost	 0.99
	ĺ		10.16	Slope	10.16		10.16
106:	I		 		I I		
Chatanika		Very limited:		IVery limited:		Very limited:	
		 Depth to saturated zone Ponding 	11.00 11.00	PondingDepth to saturated zone	1.00 1.00	PondingDepth to saturated zone	1.00
	i		11.00	Slope	11.00		1.00
			10.99	Depth to permafrost	10.99		10.99
07:	I	1	l	1	I		i
Chatanika		Very limited: Depth to saturated zone	 1.00	Very limited: Ponding	 1.00	Very limited: Ponding	 1.00
		I .	I	I	I	1	I I
			1.00 0.99	Depth to saturated zoneDepth to permafrost	1.00 0.99	Depth to saturated zoneDepth to permafrost	1.00 0.99
Goldstream	ا ا 35	l IVery limited:		l IVery limited:	1	l IVery limited:	
		-	 1.00	Depth to permafrost	1.00	-	1.00
	i	Depth to saturated zone		Ponding	11.00		11.00
	1		1.00	Depth to saturated zone	1.00	Depth to saturated zone	11 00

Map symbol and soil name	Pct.	l landfill		a sanitary ndfill		y cover for Indfill		
	lmap lunit		Standard criteria) (Standard criteria)		I (Standard criteria)			
		Rating class and I limiting features	Value	Rating class and limiting features	I Value	 Rating class and limiting features 	Value	
08:	\ 	' 	- ' 	l	' 	! 	' 	
Chena	90 	IVery limited: Seepage Too Sandy Flooding 	 1.00 1.00 0.40 	IVery limited: Seepage Flooding 		IVery limited: I Too Sandy I Seepage I Gravel content	 1.00 1.00 1.00 	
09: Dumps, landfill	 100 	 Not rated 		l INot rated		l INot rated		
10: Dumps, mine	 100 	 Not rated 		l INot rated I		l INot rated		
11: Eielson		 Very limited: Flooding Depth to saturated zone Ponding Seepage	 1.00 1.00 1.00 1.00	 Very limited: Flooding Ponding Depth to saturated zone 		 Very limited: Ponding Depth to saturated zone 	 1.00 1.00 	
12: Eielson	60 	 Very limited: Flooding Depth to saturated	 1.00 1.00	I Very limited: I Flooding I Ponding		I Very limited: Ponding Depth to saturated	 1.00 1.00	
		zone Ponding Seepage	 1.00 1.00	 Depth to saturated zone 	 1.00 	zone 		
Piledriver	 30 	 Very limited: Depth to saturated zone	 1.00	I IVery limited: I Ponding		l IVery limited: I Ponding	 1.00	
		Ponding Seepage	1.00 1.00	Depth to saturated zone Seepage	1.00	Depth to saturated zone Too Sandy	1.00 1.00	
40		Too Sandy Flooding 	1.00 0.40 	Flooding 	0.40 	Seepage Gravel content	1.00 0.16 	
13: Eielson	50 	 Very limited: Flooding Depth to saturated zone	 1.00 1.00 	IVery limited: I Flooding I Ponding I		IVery limited: Ponding Depth to saturated zone	 1.00 1.00 	
		Ponding Seepage	1.00 1.00	Depth to saturated zone	1.00 	1		
Fanana	35 	Depth to saturated	 1.00	l IVery limited: I Ponding		l IVery limited: I Ponding	 1.00	
		zone Ponding 	 1.00 	Depth to saturated zone	 1.00 	Depth to saturated	 1.00 	
	 	Depth to permafrost Flooding 	0.86 0.40 	 Depth to permafrost Flooding 	10.86 10.40 1	Depth to permafrost 	0.86 	
14: Ester	 70 	 Very limited: Depth to permafrost Depth to saturated zone	 1.00 1.00 	 Very limited: Depth to permafrost Slope	 1.00 1.00	 Very limited: Depth to permafrost Depth to bedrock	 1.00 1.00	
		Slope 	 1.00 	Depth to saturated	1.00 	Slope 	1.00 	
		Depth to bedrock	1.00 	Depth to bedrock	1.00	Depth to saturated	1.00	
		Content of organic matter	1.00 	1		Seepage 	1.00 	

Table 17. Sanitary Facilities: LandfillContinued
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Table 17.	Sanitary	Facilities:	Landfill	Continued

Map symbol and soil name	IPct.	l landfill		a sanitary ndfill	Daily cover for Iandfill			
	lmap lunit I		(Standard criteria)		I (Standard criteria)			
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value	 Rating class and limiting features 	Valu 	
15:			 	 	 	 	 	
Ester	75	Very limited:	I	Very limited:		Very limited:	1	
			11.00	Depth to permafrost	11.00		11.00	
	1	 Depth to saturated zone 	1.00 	Slope	1.00	Depth to bedrock	11.00	
	i		1.00	Depth to saturated	1.00	Slope	1.00	
	I.	1	I	zone	1	1	I .	
	 		1.00 1.00 	I Depth to bedrock I I	1.00 	 Depth to saturated zone Seepage 	1.00 1.00 	
16:			 	 				
⁻ airbanks	80 	INot limited		INot limited		INot limited		
17: Fairbanks	1 80	I Somewhat limited:	1	ISomewhat limited:		I ISomewhat limited:	1	
			 0.16 	Slope	0.16		0.16 	
18:	1	l 	l	1	I	1	!	
airbanks	70	,	 1.00	Very limited: Slope	 1.00	IVery limited:	 1.00	
	i							
19:	I	I	I	l	I.	I	I -	
Fairbanks	80			Very limited:		IVery limited:		
	1	Slope 	1.00 	Slope	1.00	Slope	11.00	
20:	i	İ	i	i	i		i	
airbanks			1	Very limited:	1	IVery limited:		
	1	Slope	1.00	Slope	11.00	Slope	11.00	
21:	i		i		i		i	
airbanks, strongly sloping			I	Somewhat limited:	I	Somewhat limited:	1	
		Slope	10.16	Slope	10.16	Slope	10.16	
airbanks, steep	30	IVerv limited:	1	IVery limited:	1	IVery limited:	ì	
			1.00	Slope	1.00		1.00	
00.			1					
22: Fairbanks	155	IVerv limited	1	Very limited:	1	IVery limited:	ì	
			11.00	Slope	1.00		1.00	
			l		I		!	
Steese	130	-	 1.00	Very limited: Seepage	ا ا1.00	Very limited: Depth to bedrock	 1.00	
	i		11.00	Depth to bedrock	11.00		11.00	
	I	Slope	1.00	I Slope	1.00	1	1	
23:			1					
airbanks	40	Very limited:	1	Very limited:	Ì	IVery limited:	i	
	I		1.00	I Slope	1.00		1.00	
N		 //	1	 //		 }	!	
Steese	130	Very limited:	 1.00	Very limited: Slope	1	Very limited: Depth to bedrock	1 1.0	
	i		11.00	Seepage	11.00		11.00	
	1	l Seepage	1.00	Depth to bedrock	1.00		1	
24:			1					
24. Fubar		Very limited:	1	Very limited:		IVery limited:	i	
		Depth to saturated zone		Depth to saturated zone	1.00	Too Sandy	1.0(
	1	1 0	11.00	l Seepage	11.00	1 0	11.0	
	1		1.00 0.40	Flooding	10.40	Gravel content	11.00	
	i			i	i		i	
Piledriver	40	Very limited:	Ì	Very limited:	i	Very limited:	i	
	I.	Depth to saturated zone		Ponding	1.00	Ponding	1.00	
			11.00	Depth to saturated zone	1.00	Depth to saturated zone		
	1		1.00 1.00	Seepage Flooding	1.00 0.40	,	11.00	
	1		11.00		10.40		10.16	
	i	5		1	i		1	

Map symbol and soil name	IPct. of map	l landfill		a sanitary ndfill	I Daily cover for I landfill		
	lunit		(Standard criteria)		(Standard criteria)		
		Rating class and I limiting features	Value	Rating class and limiting features	I Value	 Rating class and limiting features 	Value
25:	' 	' 	' 	I I	! 	I I	'
Gilmore	80 	IVery limited: Depth to bedrock Seepage	 1.00 1.00	IVery limited: Seepage Depth to bedrock	 1.00 1.00	IVery limited: Depth to bedrock Seepage	 1.00 0.52
26:	i	, 	Ì	, 	i		
Gilmore	70 	IVery limited: Depth to bedrock Seepage Slope		IVery limited: Seepage Depth to bedrock Slope	 1.00 1.00 0.16	IVery limited: I Depth to bedrock I Seepage I Slope	 1.00 0.52 0.16
27:	i	, 	Ì	, 	i		
Gilmore	75 	IVery limited: I Depth to bedrock I Seepage I Slope	 1.00 1.00 1.00	IVery limited: Seepage Depth to bedrock Slope	 1.00 1.00 1.00	IVery limited: I Depth to bedrock I Slope I Seepage	 1.00 1.00 0.52
28:	i	i	İ	I	i		i
Gilmore	70 	IVery limited: Slope Depth to bedrock Seepage	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	IVery limited: I Depth to bedrock I Slope I Seepage	 1.00 1.00 0.52
29:	1	1		1	i	1	
Gilmore	85 	IVery limited: Slope Depth to bedrock Seepage	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	IVery limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
	i						
130: Gilmore		 Von/limitod:	I	 Von/limitod:		 Vorulimitod:	
	05 	Slope Depth to bedrock Seepage	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	IVery limited: I Depth to bedrock I Slope I Seepage	1.00 1.00 0.52
131:	1		1				
Gilmore	40 	Very limited: Depth to bedrock Seepage Slope	 1.00 1.00 1.00	 Very limited: Seepage Depth to bedrock Slope	 1.00 1.00 1.00	Very limited: Depth to bedrock Slope Seepage	 1.00 1.00 0.52
_	i	I.		i .			
Ester	40 	Very limited: Depth to permafrost Depth to saturated	 1.00 1.00	IVery limited: Depth to permafrost Slope	 1.00 1.00	IVery limited:Depth to permafrostDepth to bedrock	 1.00 1.00
	ļ	I Slope	1.00	Depth to saturated	1.00	l Slope	1.00
	I I	I Depth to bedrock	 1.00	 zone Depth to bedrock 	 1.00	 Depth to saturated	 1.00
		 Content of organic matter	 1.00 	 		zone Seepage 	 1.00
32:		1	1		I	1	
Gilmore	65 	IVery limited: Depth to bedrock Seepage	 1.00 1.00	IVery limited: Seepage Depth to bedrock	 1.00 1.00	IVery limited: Depth to bedrock Seepage	 1.00 0.52
Steese	33 	IVery limited: I Depth to bedrock I Seepage	 1.00 1.00	Very limited: Seepage Depth to bedrock	 1.00 1.00	IVery limited: Depth to bedrock	 1.00
33:		1	1		1	1	
Goldstream	80 	Very limited: Depth to permafrost Depth to saturated	1.00 1.00	Very limited: Depth to permafrost Ponding	 1.00 1.00	IVery limited: Depth to permafrost Ponding	 1.00 1.00
		zone Ponding 	 1.00 	Depth to saturated zone	 1.00 	Depth to saturated	 1.00

Table 17. Sanitary Facilities:	LandfillContinued
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Map symbol and soil name		l Trench sanitary I landfill I		Area sanitary landfill (Standard criteria)		Daily cover for landfill (Standard criteria)		
	lunit	nap nit (Standard criteria) 						
	i 	Rating class and limiting features	Value 	Rating class and limiting features	Value 	 Rating class and limiting features 	Valu 	
34:			 			 	 	
Goldstream		 Depth to permafrost Depth to saturated zone 		IVery limited:Depth to permafrostPondingDepth to saturated zone	 1.00 1.00 1.00 		 1.00 1.00 1.00 	
35: ioldstream		Depth to permafrostDepth to saturated zone	 1.00 1.00 1.00	 Very limited: Depth to permafrost Ponding Depth to saturated zone	 1.00 1.00 1.00	Ponding	 1.00 1.00 1.00 	
listels		Depth to saturated zone Ponding		I IVery limited: I Depth to permafrost I Ponding I Depth to saturated zone I	 1.00 1.00 1.00 	PondingDepth to saturated zone	 1.00 1.00 1.00 1.00 	
36: Iistels		Depth to saturated zone Ponding	 1.00 1.00 1.00 1.00 	 Very limited: Depth to permafrost Ponding Depth to saturated zone 	 1.00 1.00 1.00 	PondingDepth to saturated zone	 1.00 1.00 1.00 1.00 	
37: Iarvis	 75	l IVery limited:	 	l IVery limited:		l IVery limited:		
	 	Depth to saturated zone Ponding Seepage Too Sandy	1.00 1.00 1.00 1.00 0.40	Ponding Depth to saturated zone Seepage Flooding 	1.00 1.00 1.00 0.40	 Ponding Depth to saturated zone Too Sandy Seepage 	1.00 1.00 1.00 1.00	
38:	I I	 			I	1		
arvis	 	I zone I Ponding I I Seepage I Too Sandy	 1.00 1.00 1.00 1.00 0.40	IVery limited: Ponding Depth to saturated zone Seepage Flooding	 1.00 1.00 1.00 0.40 	 Depth to saturated zone Too Sandy Seepage	 1.00 1.00 1.00 1.00 0.66	
Chena	I.	Too Sandy	 1.00 1.00 0.40 	 IVery limited: Seepage Flooding 	 1.00 0.40 	Seepage	 1.00 1.00 1.00 	
39: arvis	 45	l IVery limited:	 	l IVery limited:		l IVery limited:		
	 	 Depth to saturated zone Ponding Seepage Too Sandy 	1.00 1.00 1.00 1.00 1.00	Ponding Depth to saturated zone Seepage Flooding 	1.00 1.00 1.00 0.40	PondingDepth to saturated zoneToo SandySeepage	1.00 1.00 1.00 1.00 1.00	
Salchaket	 45 	 Very limited: Depth to saturated zone	 1.00 	I IVery limited: I Ponding I	 1.00 	I IVery limited: I Ponding I	 1.00 	
		Ponding Seepage Too Sandy Flooding	1.00 1.00 1.00 1.00 0.40	Depth to saturated zone Flooding	1.00 0.40 		1.00 1.00 1.00 1.00	

Map symbol and soil name	of	IPct. I Trench sanitary I I of I Iandfill I Imap I		a sanitary ndfill		Daily cover for landfill		
	lunit		(Standard criteria)		l (Standard criteria)			
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value 	 Rating class and limiting features 	IValu I	
40:				 				
.emeta	75 	IVery limited:Depth to permafrostDepth to saturatedzone	 1.00 1.00	IVery limited: Depth to permafrost Ponding	 1.00 1.00	IVery limited: Depth to permafrost Ponding	 1.00 1.00	
	i	Ponding	1.00	Depth to saturated	1.00	 Depth to saturated zone 	1.00	
	i	Content of organic matter	11.00	Flooding	0.40	Seepage 	1.00 	
		Flooding 	0.40 	1		Content of organic matter	1.00 	
41: .iscum	50 	 Very limited: Depth to saturated	 1.00	l IVery limited: I Ponding	 1.00	l IVery limited: I Ponding	 1.00	
		l zone l Ponding	 1.00	 Depth to saturated	 1.00	 Depth to saturated	 1.00	
		 Seepage Flooding	 1.00 0.40	I zone I Flooding	 0.40 	zone 		
Noonku	 45 	 Very limited: Flooding Depth to saturated zone	 1.00 1.00 	l IVery limited: I Flooding I Ponding	 1.00 1.00	 Very limited: Ponding Depth to saturated zone	 1.00 1.00	
		Ponding 	1.00	Depth to saturated	1.00		i	
40.	ļ	Seepage 	1.00 	1			Ì	
42: Minto	80 	l IVery limited: I Depth to saturated I zone	 1.00 	I IVery limited: I Depth to saturated I zone	 1.00 	IVery limited: Depth to saturated zone	 1.00	
43: Minto		 Very limited: Depth to saturated	 1.00	I IVery limited: I Depth to saturated	 1.00	I IVery limited: I Depth to saturated	 1.00	
	i I	zone		zone	I	zone		
44: Minto	60	Depth to saturated	 1.00	 Very limited: Depth to saturated	 1.00	 Very limited: Depth to saturated	 1.00	
		zone Slope 	l 0.04	zone Slope 	1 10.04	zone Slope 	 0.04	
45: Minto	45 	 Very limited: Depth to saturated zone	 1.00 	 Very limited: Depth to saturated zone	 1.00	 Very limited: Depth to saturated zone	 1.00	
Chatanika		I IVery limited: I Depth to saturated I zone	 1.00	I IVery limited: I Ponding	 1.00	I IVery limited: I Ponding	 1.00	
	i	Ponding	11.00	Depth to saturated	1.00	Depth to saturated	1.00	
	i	l Depth to permafrost	l0.99 l	Depth to permafrost	10.99 I	Depth to permafrost	i0.99 I	
46: <i>I</i> linto	 40 	 Very limited: Depth to saturated zone	 1.00 	 Very limited: Depth to saturated zone	 1.00	 Very limited: Depth to saturated zone	 1.00 	
Chatanika	35 	 Very limited: Depth to saturated	 1.00	I IVery limited: I Ponding	 1.00	l IVery limited: I Ponding	 1.00	
		zone Ponding 	 1.00	Depth to saturated zone	1.00	Depth to saturated	 1.00	
	ļ	Depth to permafrost	10.99	Depth to permafrost	10.99	Depth to permafrost	10.99	

Table 17. Sanitary F	acilities:	LandfillContinued
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Table 17. Sanitary Facilities: Landfill--Continued

Map symbol and soil name	Pct.	l landfill		a sanitary ndfill	Daily cover for landfill			
	lmap lunit I		l (Standard criteria)		 (Standard criteria)			
		Rating class and I limiting features	Value 	 Rating class and limiting features 	Value 	 Rating class and limiting features 	IValu I	
47:		 	 	 	 	 		
Minto	45 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00 	Very limited: Depth to saturated zone	 1.00 	
		Slope 	10.04 I	Slope 	10.04 I	Slope 	10.04 1	
Chatanika	40 	IVery limited: Depth to saturated zone	 1.00	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00	
	Ì	Ponding	11.00	Depth to saturated	1.00	Depth to saturated	1.00	
		Depth to permafrost	0.99 0.04	Depth to permafrost	10.99 10.04	Depth to permafrost	0.99 0.04	
48:							į	
Minto	45 	Very limited: Depth to saturated zone	 1.00 	IVery limited:Depth to saturatedzone	 1.00 	Very limited: Depth to saturated zone	 1.00 	
		Slope 	1.00 	Slope 	1.00 	Slope 	1.00 	
Chatanika	40 	Very limited: Depth to saturated zone	 1.00	IVery limited: Ponding	 1.00	IVery limited: I Ponding	 1.00	
		Ponding	1.00	Depth to saturated	1.00	Depth to saturated	1.00	
		Depth to permafrost	0.99 0.63	Depth to permafrost	10.99 10.63	Depth to permafrost	0.99 0.63	
49:							i	
Mosquito	85 	Very limited: Depth to saturated zone	 1.00	IVery limited: Ponding	 1.00	Very limited: Ponding	 1.00	
		Ponding	1.00	Depth to saturated	1.00	Depth to saturated	1.00	
		Content of organic	11.00	Depth to permafrost	0.92	Seepage	1.00	
	i	Depth to permafrost	10.92	Flooding	10.40	Content of organic	1.00	
	I	l Flooding	10.40	 	i	Depth to permafrost	10.92	
50: Mosquito	 45	 Ven/limited:	i	I IVery limited:	Ì	l IVery limited:	i	
viosquito		Depth to saturated	11.00	Ponding	1.00	Ponding	1.00	
	i	Ponding	1.00	Depth to saturated	1.00 	Depth to saturated	1.00	
	I	I Content of organic	1.00	Depth to permafrost	0.92	Seepage	1.00	
	i	Depth to permafrost	10.92	l Flooding	10.40	Content of organic matter	11.00	
	i	l Flooding	10.40	 	i	Depth to permafrost	10.92	
Noonku	40 	Very limited: Flooding Depth to saturated	 1.00 1.00	Very limited: Flooding Ponding	 1.00 1.00	Very limited: Ponding Depth to saturated	i 1.00 1.00	
		l zone l Ponding	 1.00	Depth to saturated zone	 1.00	zone		
E1 .		Seepage 	1.00 	1		1		
51: Noonku		l IVery limited:		I IVery limited:		l IVery limited:		
		 Flooding Depth to saturated zone 	1.00 1.00 	Flooding Ponding 	1.00 1.00 	PondingDepth to saturatedzone	1.00 1.00 	
		Ponding Seepage	1.00 1.00	Depth to saturated zone	1.00 			

Map symbol and soil name		l Trench sanitary I Iandfill		ea sanitary andfill	Daily cover for			
	lmap lunit		I (Standard criteria)		l (Stan	dard criteria)		
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value	 Rating class and limiting features 	IValu I	
	!'	 	! !	I	!	I		
52: Iorth Pole	 85	I IVery limited:		I IVery limited:		IVery limited:	1	
		Depth to saturated	1.00	Ponding	1.00	Ponding	11.00	
		zone		 Death to estimate d		 Double to continue to d		
		Ponding 	1.00	 Depth to saturated zone 	1.00	 Depth to saturated zone 	11.00	
	i	l Seepage	1.00	l Seepage	11.00	Too Sandy	1.00	
		Too Sandy	1.00	Flooding	10.40	Seepage	1.00	
		Flooding 	10.40 I	1		Gravel content	10.01 I	
3:	İ		i	i .	į	i .	i	
lorth Pole	50	Very limited: Depth to saturated	 1.00	Very limited: Ponding	 1.00	Very limited: Ponding	 1.00	
		zone			11.00			
	Ì	Ponding	1.00	Depth to saturated	11.00	Depth to saturated	11.00	
				zone		zone		
		Seepage Too Sandy	1.00 1.00	Seepage Flooding	1.00 0.40	Too Sandy Seepage	1.00 1.00	
	i	Flooding	10.40			Gravel content	10.0	
losquito		l IVery limited:		I IVery limited:		IVery limited:		
iosquito		Depth to saturated	1.00	Ponding	1.00	Ponding	11.00	
	I	zone	I.		I		I	
		l Ponding	11.00	Depth to saturated	1.00	 Depth to saturated zone 	1.0	
	İ	Content of organic	1.00	Depth to permafrost	10.92	Seepage	1.0	
		Matter	 0.92	 Elooding	l 10.40	Contont of organia	 1.0	
		I Depth to permafrost	10.92	Flooding 	10.40	Content of organic matter		
		Flooding	10.40		1	Depth to permafrost	10.92	
iscum	20	IVery limited:		Very limited:	1	Very limited:	i	
	I I	Depth to saturated	1.00	Ponding	11.00	Ponding	11.00	
		zone Ponding	 1.00	Depth to saturated	 1.00	Depth to saturated	 1.00	
				zone		zone		
	I	Seepage	1.00	Flooding	10.40	I	I.	
		Flooding	10.40			1		
54:					1		Ì	
orth Pole	55	Very limited:	I	Very limited:	I	Very limited:	I	
		Depth to saturated zone	11.00	Ponding	11.00	Ponding	1.0	
		Ponding	1.00	Depth to saturated	1.00	Depth to saturated	11.00	
	I.			l zone		zone	1	
		Seepage Too Sandy	1.00 1.00	Seepage Flooding	1.00 0.40	Too Sandy Seepage	1.0 1.0	
		Flooding	10.40			Gravel content	10.0	
			I.		ļ		1	
oonku		Very limited: Flooding	 1.00	Very limited: Flooding	11.00	Very limited: Ponding	 1.0	
	i	Depth to saturated	11.00	Ponding	11.00	Depth to saturated	1.0	
	1	l zone				l zone	1	
		Ponding 	1.00	Depth to saturatedzone	1.00	1		
	i	Seepage	1.00		i	Ì	i	
55:			1			1		
eede	85	IVery limited:	Ì	IVery limited:	i	IVery limited:	i	
	I.	Flooding	1.00	Flooding	11.00	Ponding	11.00	
		Depth to saturated	1.00	Ponding	1.00	Depth to saturated	1.00	
	1	zone Ponding	 1.00	Depth to saturated	 1.00	zone 		
	i		1	zone	1		i	

Table 17. Sanitary F	acilities:	LandfillContinued
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Table 17. Sanitar	y Facilities: LandfillContinued

Map symbol and soil name	Pct. of	l landfill	andfill landfill		Daily cover for landfill (Standard criteria)		
	lmap lunit I						
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value	 Rating class and limiting features 	IValu I
56:				 			
Peede		IVery limited:		IVery limited:		IVery limited:	
		 Flooding Depth to saturated zone 		Flooding Ponding 	1.00 1.00 	PondingDepth to saturatedzone	1.00 1.00
	İ	Ponding	1.00 	Depth to saturated	1.00 		İ
Aosquito		I Very limited:		IVery limited:		IVery limited:	
		Depth to saturated	1.00	Ponding	1.00	Ponding	1.00
		zone Ponding	 1.00	Depth to saturated	 1.00	Depth to saturated	 1.00
	ļ	Content of organic	1.00	 zone Depth to permafrost 	10.92	l zone I Seepage	1.00
		I matter I Depth to permafrost	 0.92 	 Flooding 	 0.40 	Content of organic matter	 1.00
	i I	Flooding 	10.40 I	i I		Depth to permafrost	10.92 I
157: Piledriver	ا 5	I Very limited:	I	I IVery limited:	1	I Very limited:	
licanvor		Depth to saturated	1.00	Ponding	1.00	Ponding	1.00
		Ponding 	 1.00 	Depth to saturated	1.00 	Depth to saturated	1.00
		Seepage	1.00	l Seepage	1.00	Too Sandy	1.00
		Too Sandy Flooding 	1.00 0.40 	Flooding 	0.40 	Seepage Gravel content 	1.00 0.16
58: Piledriver	i 50	I Very limited:	i	I IVery limited:	i	I Very limited:	i I
	I	Depth to saturated	1.00	Ponding	1.00	Ponding	1.00
	i	l Ponding	1.00	Depth to saturated	1.00	Depth to saturated	1.00
	Ì	Seepage	1.00	Seepage	11.00	Too Sandy	1.00
		Too Sandy Flooding	1.00 0.40	Flooding	0.40 	Seepage Gravel content	1.00 0.16
Eielson		IVery limited:	I	Very limited:		Very limited:	i
		Flooding		Flooding	11.00	Ponding	11.00
		 Depth to saturated zone 	1.00 	Ponding 	1.00 	Depth to saturatedzone	1.00
		Ponding 	1.00 	Depth to saturatedzone	1.00 	1	
		Seepage 	1.00 	1	1	1	I
59:			I		1		1
Piledriver	50 	Very limited: Depth to saturated zone	 1.00 	IVery limited: I Ponding	 1.00	Very limited: Ponding	 1.00
	i I	Ponding 	1.00 	I Depth to saturated zone	1.00 	 Depth to saturated zone 	1.00
		Seepage	1.00	Seepage	1.00 0.40	Too Sandy Seepage	11.00
	ļ	Too Sandy Flooding	1.00 0.40	Flooding 		Gravel content	1.00 0.16
-ubar		IVery limited:		IVery limited:		Very limited:	
		Depth to saturated	•	Depth to saturatedzone	1.00 	Too Sandy	1.00
		SeepageToo Sandy	1.00 1.00	SeepageFlooding	1.00 0.40	SeepageGravel content	1.00 1.00
		Flooding	10.40	 		 	
60: Pits, gravel	 100	, Not rated		INot rated		INot rated	i
, gravor			i		i		i

Map symbol and soil name	IPct. I of	landfill landfill		Daily cover for I landfill			
	lmap lunit		l I (Standard criteria)		l I (Standard criteria)		
		Rating class and limiting features	Value Value	 Rating class and limiting features 	Value 	 Rating class and limiting features 	IValu I
51:	' 	 	 	 	' 	 	
Pits, quarry	100 	Not rated	İ	Not rated	l	INot rated	I
62: Riverwash	 100	l INot rated		I Not rated		l INot rated	
63:	I	1	I		I		I I
Salchaket	85 	Depth to saturated	 1.00	Very limited: Ponding	 1.00	IVery limited:	 1.00
		zone Ponding	 1.00	Depth to saturated	l 1.00	I I Depth to saturated	ا 1.00
		 Seepage	 1.00	I zone I Flooding	l 10.40	zone Too Sandy	 1.00
		Too Sandy Flooding	1.00 0.40	 		Seepage 	1.00
64:							
Salchaket	45 	Very limited: Depth to saturated	 1.00	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00
		zone Ponding	1.00	Depth to saturated	11.00	I Depth to saturated I zone	1.00
		I Seepage	1.00	Flooding	10.40	Too Sandy	 1.00
		Too Sandy Flooding	1.00 0.40			Seepage 	1.00
ypic Cryorthents	ا 40	I Very limited:	1	IVery limited:		l IVery limited:	I
		Seepage Flooding	1.00 0.40	Seepage Flooding	1.00 0.40	Seepage 	1.00
65:		1	I		I		Ì
Saulich	80 	Very limited: Depth to saturated zone	 1.00	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00
		Ponding	1.00	Depth to saturated	11.00	 Depth to saturated zone 	1.00
		Content of organic	1.00	Depth to permafrost	0.99	Seepage	1.00
	i	Depth to permafrost	10.99	 	Ì	l Content of organic	1.00
		 	i I	 	i I	Depth to permafrost	10.99 1
66: Saulich	ا 80 ا	l IVery limited:	l	l IVery limited:		l IVery limited:	
		 Depth to saturated zone 	1.00 	Ponding	1.00 	l Ponding	1.00
		Ponding	1.00	Depth to saturated	11.00	<pre>I Depth to saturated I zone</pre>	1.00
	l I	Content of organic	1.00	Depth to permafrost	0.99	Seepage	1.00
		I matter I Depth to permafrost	0.99	Slope	0.16	l Content of organic	1.00
		Slope	0.16	1		Depth to permafrost	0.99
67:		 }	Ì	 Von (limited)	Ì	 Von (limitod)	i
Saulich	75 	Very limited: Depth to saturated	 1.00	IVery limited: Ponding	 1.00	IVery limited: I Ponding	 1.00
		I zone I Ponding	 1.00	 Depth to saturated zone 	 1.00	I Depth to saturated	 1.00
		Content of organic	1.00	Slope	11.00	l Seepage	1.00
		Slope	1.00	Depth to permafrost	 0.99 	I Content of organic	 1.00
	İ	Depth to permafrost	10.99		i	Slope	1.00

Table 17. Sanitary Facilities: LandfillContinue	Table 17.	Sanitary	Facilities:	LandfillContinue
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Table 17.	Sanitary I	Facilities:	Landfill	Continued

Map symbol and soil name	IPct.	l landfill		a sanitary Indfill		y cover for andfill		
	lmap lunit I		l I (Stan	dard criteria)	l (Standard criteria)			
		Rating class and I limiting features	Value 	 Rating class and limiting features 	Value 	 Rating class and limiting features 	IValu I	
68:	'' 		 	 	! 	 	 	
Saulich	40 	IVery limited: I Depth to saturated I zone	 1.00	IVery limited: Ponding	 1.00	IVery limited: Ponding	 1.00	
	l	Ponding	1.00	Depth to saturated	1.00	Depth to saturated	1.00	
		Content of organic	1.00 	Depth to permafrost	10.99 I	Seepage	1.00 	
		Depth to permafrost 	0.99 	 		Content of organicmatterDepth to permafrost	1.00 0.99	
Minto		Very limited:	 1.00	Very limited:	 1.00	Very limited: Depth to saturated	 1.00	
		zone Slope	I 10.04	zone Slope	 0.04	zone Slope	 0.04	
69:	i							
Saulich	40	Very limited: Depth to saturated	11.00	IVery limited: Ponding	1.00	Very limited: Ponding	 1.00	
		zone Ponding 	11.00	Depth to saturated	1.00	Depth to saturated	 1.00	
		Content of organic	11.00	Slope	1.00	Seepage	1.00	
	İ	Slope	1.00	Depth to permafrost	0.99	Content of organic	1.00	
	I	l Depth to permafrost	10.99 I	 	i	Slope	1.00	
Minto	35 	IVery limited: Depth to saturated zone Slope	 1.00 1.00	IVery limited: Depth to saturated zone Slope	 1.00 1.00	IVery limited: Depth to saturated zone Slope	 1.00 1.00	
170:				1	I		Ì	
Steese		IVery limited: Depth to bedrock Seepage	 1.00 1.00	IVery limited: Seepage Depth to bedrock	 1.00 1.00	IVery limited: Depth to bedrock 	 1.00 	
I71: Steese	 80	l IVery limited:		l IVery limited:	i	l IVery limited:	Ì	
	 	Depth to bedrock Seepage Slope	1.00 1.00 0.16	Seepage Depth to bedrock Slope	1.00 1.00 0.16	Depth to bedrock Slope 	1.00 0.16 	
72: Steese	 70	 Very limited:	i	l IVery limited:	i	l IVery limited:	i	
		Depth to bedrock Seepage Slope	1.00 1.00 1.00	 Seepage Depth to bedrock Slope 	1.00 1.00 1.00	Depth to bedrock Slope 	1.00 1.00 	
73: Steese		l IVery limited:		l IVery limited:		 Very limited:	i	
0.6656		Slope Depth to bedrock Seepage	1.00 1.00 1.00	I Seepage Depth to bedrock	1.00 1.00 1.00	Depth to bedrock Slope	1.00 1.00 	
74: Steese	 85	ı I IVery limited:		I I IVery limited:		I I IVery limited:		
	05 	Slope Depth to bedrock Seepage	1.00 1.00 1.00 	I Seepage Depth to bedrock	 1.00 1.00 1.00	Depth to bedrock Slope 	 1.00 1.00 	
75: Steese	 90	l IVery limited:		IVery limited:	i	 Very limited:		
010000	50 	Slope Depth to bedrock Seepage	1.00 1.00 1.00	 Slope Seepage Depth to bedrock 	 1.00 1.00 1.00	Depth to bedrock Slope 	1.00 1.00 	

Map symbol and soil name	IPct. I of Imap	l landfill		a sanitary ndfill	Daily cover for			
	lunit		(Standard criteria)			idard criteria)		
		Rating class and limiting features	 Value 	Rating class and limiting features	Value 	 Rating class and limiting features 	Value 	
176:	 		 	 	 	 		
Steese	55 	 Depth to bedrock Seepage 	 1.00 1.00 1.00	IVery limited: Seepage Depth to bedrock Slope	 1.00 1.00 1.00		 1.00 1.00 	
Gilmore		l Seepage	 1.00 1.00 1.00	l Very limited: l Seepage l Depth to bedrock l Slope	 1.00 1.00 1.00	•	 1.00 1.00 0.52	
177:					i		Ì	
Steese		I Slope I Depth to bedrock	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	•	 1.00 1.00 	
Gilmore	I	I Slope I Depth to bedrock	 1.00 1.00 1.00	 Very limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	Slope	 1.00 1.00 0.52	
178:	I		 		I		1	
Steese	I	I Slope I Depth to bedrock	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	•	 1.00 1.00 	
Gilmore		 Slope Depth to bedrock 	 1.00 1.00 1.00	l IVery limited: I Slope I Seepage I Depth to bedrock	 1.00 1.00		 1.00 1.00 0.52	
179:					ļ			
Steese		 Slope Depth to bedrock 	 1.00 1.00 1.00	IVery limited: Slope Seepage Depth to bedrock	 1.00 1.00 1.00	•	 1.00 1.00 	
Gilmore		 Slope Depth to bedrock 	 1.00 1.00 1.00	l IVery limited: I Slope I Seepage I Depth to bedrock	 1.00 1.00 1.00		 1.00 1.00 0.52	
180: Tanacross		 Von limitod:		l IVery limited:	į	1	i	
Tanacross	 	 Depth to permafrost Depth to saturated zone Ponding 	 1.00 1.00 1.00 0.40	I Depth to permafrost Ponding Depth to saturated zone Flooding	 1.00 1.00 1.00 0.40		 1.00 1.00 1.00 	
181:		' 		' 	i	' }	į	
Tanana	I	Depth to permafrost	 1.00 1.00 0.86 0.40 	IVery limited: Ponding Depth to saturated zone Depth to permafrost Flooding	 1.00 1.00 0.86 0.40	 IVery limited: Ponding Depth to saturated zone Depth to permafrost I 	 1.00 1.00 0.86 	

Table 17. Sanitary Facilities:	LandfillContinued
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Table 17. Sanitar	y Facilities: LandfillContinued

and soil name		I Trench sanitary		a sanitary ndfill		Daily cover for			
	lmap lunit		l (Stan	dard criteria)	l (Stan	dard criteria)			
		Rating class and I limiting features	I Value 	 Rating class and limiting features 	 Value 	 Rating class and limiting features 	Value 		
82:			 	 	 I	 	 		
Tanana	60	IVery limited:	I	IVery limited:	i	Very limited:	i		
		Depth to saturated zone		Ponding	1.00		1.00		
				Depth to saturated zone	11.00	Depth to saturated zone			
		0		Depth to permafrost	10.86		0.86		
				Flooding	10.40				
Mosquito	 20	 Verv limited:	 	IVery limited:		IVery limited:	 		
	0	Depth to saturated zone		Ponding	1.00	2	1.00		
				Depth to saturated zone	11.00	Depth to saturated zone			
			1.00	Depth to permafrost	10.92		1.00		
		matter		1					
		Depth to permafrost	10.92 I	Flooding	10.40 I	Content of organic matter	1.00 		
		Flooding	10.40	i	i		10.92		
83:			 	1		1			
Typic Cryaquents	30	IVery limited:	i	Very limited:	i	Very limited:	i		
		Flooding	1.00	Flooding	1.00	Ponding	1.00		
			1.00	Ponding	1.00		1.00		
		zone Ponding 	 1.00 	Depth to saturated	 1.00 	zone 	 		
Histic Cryaquepts	25	l IVery limited:	 	IVery limited:		IVery limited:			
				Ponding	1.00	,	1.00		
		zone	I	1	Ì				
		Ponding 	1.00 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00 		
Terric Cryofibrists	 20	IVery limited:	1 	IVery limited:		IVery limited:	 		
,			1.00	Ponding	1.00		1.00		
		l zone	I		I		I		
		Ponding	1.00	Depth to saturated	1.00	•	1.00		
		I I Too clayey	l 10.50	zone Seepage	 1.00	l zone l Too clayey	 0.50		
84: Typic Cryorthents	 80	l IVery limited:	 	I Somewhat limited:		IVery limited:	 		
				Flooding	0.40		, 1.00		
			1.00		1				
			0.40	Ì		ĺ	ĺ		
85:			 		I				
	45	IVery limited:	I	IVery limited:	Ì	Very limited:	I		
				Seepage	1.00		1.00		
		Flooding	0.40	Flooding	10.40				
Jrban land	 45 	INot rated	 	INot rated		INot rated	 		
86:		İ	Ì	i	i	i			
Jrban land	100	Not rated		Not rated		Not rated			
87:			l		İ				
Vater	100	Not rated	1	Not rated	1	Not rated	1		

Table 18. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

and soil name	 Pct. of map	Potential source of gravel		ntial source of sand	
	l unit	(Alaska criteria)	i (Ala	ska criteria)	
	 	Rating class and limiting features	 Value 	 Rating class and limiting features 	IValue I
101: Bolio	 75 	Improbable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00 	I Improbable: I Organic soil I Bottom layer not a source I Depth to permafrost	 0.00 0.00 0.00
102: Bradway	 85 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.21 	I IImprobable: I Bottom layer not a source I No permafrost depth I limitation	 0.00 0.21
103: Chatanika	 75 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01
104: Chatanika	 75 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01
105: Chatanika	 80 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01
106: Chatanika	 80 	 Improbable: Bottom layer not a source No permafrost depth Iimitation	 0.00 0.01	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01
107: Chatanika	 55 	Improbable: Bottom layer not a source No permafrost depth Inimitation	 0.00 0.01	Improbable: I Bottom layer not a source No permafrost depth I limitation	 0.00 0.01
Goldstream	 35 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00
108: Chena	 90 	l IGravel source		I ISand source	i I I
109: Dumps, landfill	 100 	I INot rated	 	 Not rated	
110: Dumps, mine	 100 	I Not rated	 	INot rated	
111: Eielson	 80 	IGravel source	 	 Improbable: Bottom layer not a source 	 0.00

Map symbol and soil name	Pct. of map	Potential source of gravel	Potential source of sand (Alaska criteria)			
	l unit	l (Alaska criteria)				
		Rating class and limiting features	IValue	 Rating class and limiting features 	IValue	
12:	: ! !		i I		- : 	
Eielson	60 	Gravel source 		Improbable: Bottom layer not a source	 0.00	
Piledriver		I IGravel source		I ISand source		
I 13: Eielson		 Gravel source		 Improbable: Bottom layer not a	 0.00	
	i	1	i	source		
Tanana	35 	IImprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14 	IImprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14 	
14: Ester	 70 	 Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	 Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	
15: Ester	75 	Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	
16: Fairbanks	 80 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
17: Fairbanks	 80 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
18: Fairbanks	 70 	 Improbable: Bottom layer not a source	 0.00 	 Improbable: Bottom layer not a source	 0.00 	
19: Fairbanks	 80 	 Improbable: Bottom layer not a source 	 0.00	 Improbable: Bottom layer not a source 	 0.00	
20: Fairbanks	 85 	 Improbable: Bottom layer not a source 	 0.00	 Improbable: Bottom layer not a source 	 0.00	
21: Fairbanks, strongly sloping	g 60 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
airbanks, steep		IImprobable: Bottom layer not a source 	 0.00 	IImprobable: Bottom layer not a source 	 0.00 	
22: ⁻ airbanks	 55 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00	
Steese	30 	Improbable: Bottom layer not a source	 0.00 	Improbable: Bottom layer not a source 	 0.00	
23: Fairbanks	 40 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	i I I0.00	
Steese		Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	 0.00	

Map symbol and soil name	Pct. of map unit	of gravel map		Potential source of sand (Alaska criteria)			
		Rating class and limiting features	IValue	 Rating class and limiting features 	IValue I		
124: Fubar	 50	 Gravel source	- ' 	I I ISand source	- ! 		
Piledriver	 40	l IGravel source		l ISand source			
125: Gilmore	 80 	 Improbable: Bottom layer not a source	 0.00 	 Improbable: Bottom layer not a source	 0.00		
126: Gilmore	 	l Ilmprobable: I Bottom layer not a source I	 0.00 	I Improbable: I Bottom layer not a source I	 0.00 		
127: Gilmore	 75 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 		
128: Gilmore	 70 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 		
129: Gilmore	 85 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00		
130: Gilmore	 85 	Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00		
131: Gilmore	40	Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00		
Ester	40 	Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00		
132: Gilmore	 65 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00		
Steese	 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 		
133: Goldstream	 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.00 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.00 		
134: Goldstream	 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 		
135: Goldstream	 50 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.00		
Histels	 	Improbable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00	Improbable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00		

Map symbol and soil name	Pct. of map	Potential source of gravel	Potential source of sand (Alaska criteria)			
	l unit	I (Alaska criteria)				
		Rating class and limiting features	IValue	 Rating class and limiting features 	IValue I	
36: Histels	 	 Improbable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00	 Improbable: Organic soil Bottom layer not a source Depth to permafrost	 0.00 0.00 0.00	
37: Jarvis		 Gravel source		 Sand source		
38: Jarvis		 Gravel source		 Sand source		
Chena		IGravel source		I ISand source		
39: Jarvis	45	 Gravel source		 Sand source		
alchaket		IGravel source	i	I ISand source		
40: Lemeta		Improbable: Organic soil Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 0.00 	Improbable: Organic soil Bottom layer not a source No permafrost depth Imitation	 0.00 0.00 0.00	
41: .iscum	50	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Noonku	 45 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00	
42: Minto	 80 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
43: Minto	 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
44: Minto	 60 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 	
45: Minto	 45 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
hatanika		Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	
46: Minto	40	Improbable: Bottom layer not a source	, 0.00	Improbable: Bottom layer not a source	 0.00	
Chatanika	 	 Improbable: Bottom layer not a source No permafrost depth limitation 	 0.00 0.01 	 Improbable: Bottom layer not a source No permafrost depth limitation 	 0.00 0.01 	

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)	Potential source of sand (Alaska criteria)			
		I Rating class and I limiting features	_ I IValue I	 Rating class and limiting features 	IValue	
147:	 	 	 		 	
Minto	45 	IImprobable: Bottom layer not a source	 0.00	IImprobable: Bottom layer not a source	 0.00	
Chatanika		Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	
148:	1		į		i	
Minto	45 	IImprobable: Bottom layer not a source	 0.00	IImprobable: Bottom layer not a source	 0.00	
Chatanika	40 	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Ilmprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	
149:		' 	į	 	i	
Mosquito	 	IImprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	IImprobable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	
150: Mosquito		 Improbable:		 Improbable:		
		 Bottom layer not a source No permafrost depth limitation 	10.00 10.08 1	 Bottom layer not a source No permafrost depth limitation 	10.00 10.08 1	
Noonku		Gravel source		Improbable: Bottom layer not a source	0.00	
151:	I		I		I	
Noonku	80 	lGravel source I I		IImprobable: Bottom layer not a source 	 0.00 	
152: North Pole	 85	 Gravel source	i	 Improbable:	i	
				Bottom layer not a source	0.00 	
153: North Pole	 50 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00	
Mosquito	30 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	
Liscum	 20 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 	
154: North Pole	 55 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00	
Noonku	25 	 Gravel source 		 Improbable: Bottom layer not a source	 0.00	
155:			ļ		1	
Peede		Improbable: Bottom layer not a source	 0.00	Improbable: Bottom layer not a source	 0.00	

Map symbol and soil name	l Pct. I of I map	Potential source of gravel	Potential source of sand (Alaska criteria)			
	l unit	l (Alaska criteria)				
		Rating class and limiting features	IValue	 Rating class and limiting features 	IValue I	
56: Peede	 70	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Mosquito	 25 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	
57: Piledriver	 75 	 Gravel source 	 	 Sand source 	 	
58: Piledriver	ا ا 50	l IGravel source		l ISand source		
Eielson	 35 	 Gravel source 		Improbable: Bottom layer not a source	 0.00	
59: Piledriver	i I 50	 Gravel source		 Sand source	- 	
ubar		Gravel source	i	Sand source 	i	
60: Pits, gravel	 100 	 Not rated 	 	 Not rated 	 	
61: ^{>} its, quarry	 100 	 Not rated 	 	 Not rated 		
62: Riverwash	 100 	 Not rated		 Not rated		
63: Salchaket	 85 	 Gravel source 	 	 Sand source 		
64: Salchaket	ا ا 45	l IGravel source		l ISand source		
Typic Cryorthents		l IGravel source		l ISand source		
165: Saulich	 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	
66: Saulich	80 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	
67: Saulich	75 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	
68: Saulich	 40 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01	
Minto	 40 	 Improbable: Bottom layer not a source	 0.00 	 Improbable: Bottom layer not a source	 0.00	

Map symbol and soil name	Pct. of map unit	Potential source of gravel (Alaska criteria)	Potential source of sand (Alaska criteria)			
		Rating class and Imiting features	_ Value 	 Rating class and limiting features 	Value	
169: Saulich	 40 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.01 	Improbable: Bottom layer not a source No permafrost depth Imitation	 0.00 0.01	
Minto	35 	I IImprobable: I Bottom layer not a source	I I I0.00	Improbable: Bottom layer not a source	 0.00	
170: Steese	 80 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00	
171: Steese	 80 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 	
172: Steese	 70 	 Improbable: Bottom layer not a source 	 0.00 	 Improbable: Bottom layer not a source 	 0.00 	
173: Steese	 75 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
174: Steese	 85 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
175: Steese	 	 Improbable: Bottom layer not a source	 0.00	I Improbable: Bottom layer not a source	 0.00	
176: Steese	 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Gilmore	25 	Improbable: Bottom layer not a source	 0.00	Improbable: Bottom layer not a source	 0.00	
177: Steese	 50 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Gilmore	 40 	Improbable: Bottom layer not a source	 0.00 	Improbable: Bottom layer not a source 	 0.00 	
178: Steese	 50 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Gilmore	. 40 	Improbable: Bottom layer not a source	 0.00 	Improbable: Bottom layer not a source	 0.00	
79: Steese	 45 	 Improbable: Bottom layer not a source	 0.00	 Improbable: Bottom layer not a source	 0.00	
Gilmore	45 	I IImprobable: I Bottom layer not a source	 0.00 	I IImprobable: I Bottom layer not a source	 0.00	
80: Tanacross	 90 	 Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	 Improbable: Bottom layer not a source Depth to permafrost	 0.00 0.00	

Map symbol and soil name	Pct. of map	Potential source of gravel	Potential source of sand			
	l unit	(Alaska criteria)	l (Ala	ska criteria)		
	 	Rating class and limiting features	Value 	 Rating class and limiting features 	Value 	
181: Tanana	 75 	 Improbable: Bottom layer not a source No permafrost depth limitation 	 0.00 0.14 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14 	
182: Tanana	 60 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14 	 Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.14 	
Mosquito	20 	Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	Improbable: Bottom layer not a source No permafrost depth limitation	 0.00 0.08 	
183: Typic Cryaquents	I 30	 Improbable: Bottom layer not a source	 0.00	Improbable: Bottom layer not a source	 0.00	
Histic Cryaquepts	25	I IImprobable: Bottom layer not a source	1 0.00	Improbable: Bottom layer not a source	0.00	
Ferric Cryofibrists	20 	Improbable: Organic soil Bottom layer not a source	 0.00 0.00 	Improbable: Organic soil Bottom layer not a source 	 0.00 0.00 	
184: Typic Cryorthents	 80 	 Gravel source 		 Improbable: Bottom layer not a source 	 0.00 	
185: Typic Cryorthents, fill	 45 	 Gravel source 	 	 Sand source 	 	
Urban land	 45 	l INot rated I		 Not rated 		
186: Urban land	i l100	l INot rated		INot rated		
187: Water	, 100	Not rated		INot rated		

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map	Potential source of topsoil (Alaska criteria)	Potential source of roadfill (Alaska criteria)			
	unit 	Rating class and limiting features	 Value 	 Rating class and limiting features 	Value 	
101: Bolio	 75 	 Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	 0.00 0.00 0.00 0.12	 Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00	
102: Bradway	 85 	Poor: Poo:: Poo::	 0.00 0.21 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.21	
103: Chatanika	 75 	 Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.01 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01	
104: Chatanika	 75 	Poor: Depth to saturated zone No permafrost depth limitation 	0.00	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01	
105: Chatanika	80 	 Poor: Depth to saturated zone No permafrost depth limitation Slope 	0.00 0.01	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01	
106: Chatanika	 80 	 Poor: Depth to saturated zone Slope No permafrost depth limitation 	0.00	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01	
107: Chatanika	 55 	 Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.01 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01	
Goldstream	 35 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.00 0.18	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00	

Map symbol and soil name	Pct.	Potential source of topsoil		Potential source of roadfill	
	l map l unit	I (Alaska criteria)	I (Alaska criteria)		
		Rating class and limiting features	Value	 Rating class and limiting features 	Value
108: Chena	 90 	 Poor: Rock fragment content	 0.00	 Good source 	
109: Dumps, landfill	100	Not rated		l Not rated	
110: Dumps, mine	100	Not rated		Not rated	
111: Eielson	 80 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
112: Eielson	 60 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Piledriver	 30 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
113: Eielson	 50 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Tanana	 35 	 Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.14 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.14
114: Ester	 70 	 Poor: Slope Depth to saturated zone Content of organic matter Depth to permafrost Depth to bedrock Too acid	 0.00 0.00 0.00 0.00 0.18 	 Poor: Depth to bedrock Depth to saturated zone High frost action (check lower layers) Slope Depth to permafrost	 0.00 0.00 0.00 0.00
115: Ester	 75 	 Poor: Slope Depth to saturated zone Content of organic matter Depth to permafrost Depth to bedrock 	 0.00 0.00 0.00 0.00 0.00	 Poor: Depth to bedrock Depth to saturated zone Slope High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00 0.00
116: Fairbanks	 80 	Too acid Good source 	0.18 	 Poor: High frost action (check lower layers)	 0.00

	Table 19.	Construction Materials:	Topsoil and Roadfill-	-Continued
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Map symbol and soil name	Pct.	Potential source of topsoil	i I	Potential source of roadfill	
	map unit	I (Alaska criteria)	l (Alaska criteria)		
	 	Rating class and limiting features	Value Value	Rating class and limiting features	Value
17: Fairbanks	 80 	 Fair: Slope 	 0.84 	 Poor: High frost action (check lower layers)	 0.00
18: Fairbanks	 70 	 Poor: Slope 	 0.00 	 Poor: High frost action (check lower layers)	 0.00
I 19: Fairbanks	 80 	 Poor: Slope 	 0.00	 Poor: High frost action (check lower layers) Slope	 0.00 0.00
120: Fairbanks	 85 	 Poor: Slope 	 0.00 	 Poor: Slope High frost action (check lower layers)	 0.00 0.00
I21: Fairbanks, strongly sloping	 60 	 Fair: Slope 	 0.84	 Poor: High frost action (check lower layers)	 0.00
Fairbanks, steep	 30 	 Poor: Slope 	 0.00 	 Poor: Slope High frost action (check lower layers)	 0.00 0.00
122: Fairbanks	 55 	 Poor: Slope 	 0.00 	 Poor: High frost action (check lower layers)	 0.00
Steese	 30 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
123: Fairbanks	 40 	I I Poor: I Slope I	 0.00 	 Poor: High frost action (check lower layers) Slope	 0.00 0.00
Steese	 30 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
124: Fubar	 50 	 Poor: Rock fragment content	0.00	 Good source 	
Piledriver	 40 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00

Map symbol and soil name	Pct. of	Potential source of topsoil	of I Potential source of I roadfill		
	l map l unit	I (Alaska criteria)	l (Alaska criteria)		
		Rating class and limiting features	<u> </u> Value 	 Rating class and limiting features 	Value
125: Gilmore	 80 	 Poor: Rock fragment content Depth to bedrock 	 0.00 0.00 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
126: Gilmore	 70 	 Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
127: Gilmore	 75 	 Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.00	 Poor: Depth to bedrock Moderate frost action (check lower layers) Slope	 0.00 0.50 0.98
128: Gilmore	 70 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
129: Gilmore	 85 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
130: Gilmore	 85 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50
131: Gilmore	 40 	 Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.00	 Poor: Depth to bedrock Moderate frost action (check lower layers) Slope	 0.00 0.50 0.98
Ester	 40 	 Poor: Slope Depth to saturated zone Content of organic matter Depth to permafrost Depth to bedrock Too acid	 0.00 0.00 0.00 0.00 0.18 	 Poor: Depth to bedrock Depth to saturated zone High frost action (check lower layers) Slope Depth to permafrost 	 0.00 0.00 0.00 0.00 0.00
132: Gilmore	 65 	 Poor: Rock fragment content Depth to bedrock 	 0.00 0.00 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50
Steese	33 	Fair: Depth to bedrock 	 0.79 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50

Map symbol and soil name	Pct. of	Potential source of topsoil	I Potential source of I roadfill			
	map unit 	I (Alaska criteria)	(Alaska criteria)			
		Rating class and limiting features	Value	Rating class and limiting features	Value 	
133: Goldstream	80 80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.00 0.18	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00	
134: Goldstream	80 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	0.00 0.00 0.00 0.18	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00	
135: Goldstream	 50 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	0.00 0.00 0.00 0.18	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.00	
Histels	45 	Poor: Depth to saturated zone Content of organic matter Depth to permafrost Too acid	0.00 0.00 0.00 0.18	 Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost 	 0.00 0.00 0.00	
136: Histels	 90 	Poor: Poor: Poor: Content of organic matter Depth to permafrost Too acid	0.00 0.00 0.00 0.18	 Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00	
137: Jarvis	 75 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 	
138: Jarvis	 55 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 	
Chena	 35 	 Poor: Rock fragment content	 0.00	l I Good source I	 	
139: Jarvis	 45 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 	
Salchaket	 45 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 	

Map symbol and soil name	Pct. of	Potential source of topsoil	Potential source of roadfill			
	map unit	I (Alaska criteria)	I (Alaska criteria)			
		Rating class and limiting features	Value 	 Rating class and limiting features 	Value 	
140: Lemeta	 75 	Poor: Depth to saturated zone Content of organic matter No permafrost depth	 0.00 0.00 0.00	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth	 0.00 0.00 0.00	
		limitationToo acid	 0.76 	l limitation l l	 	
141: Liscum	 50 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
Noonku	45 	Poor: Depth to saturated zone 	 0.00 	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
142: Minto	 80 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
143: Minto	 70 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 	
144: Minto	 60 	 Poor: Depth to saturated zone Slope 	 0.00 0.96 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
145: Minto	 45 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
Chatanika	40 	Poor: Depth to saturated zone No permafrost depth imitation	 0.00 0.01 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation 	 0.00 0.00 0.01	
146: Minto	 40 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
Chatanika	35 	 Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.01 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation 	 0.00 0.00 0.01	

Map symbol and soil name	Pct. of map	Potential source of topsoil		Potential source of roadfill	
	l unit l l	(Alaska criteria) [Rating class and limiting features	 Value	(Alaska criteria)	Value
	i		İ		İ
147: Minto	 45 	 Poor: Depth to saturated zone Slope 	 0.00 0.96	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Chatanika	 40 	 Poor: Depth to saturated zone No permafrost depth limitation Slope 	 0.00 0.01 0.96 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation 	 0.00 0.00 0.01
148: Minto	 45 	 Poor: Depth to saturated zone Slope 	 0.00 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Chatanika	 40 	 Poor: Depth to saturated zone No permafrost depth limitation Slope 	 0.00 0.01 0.37	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01
149: Mosquito	 85 	 Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08
150: Mosquito	 45 	 Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08
Noonku	 40 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
151: Noonku	 80 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
152: North Pole	 85 	 Poor: Depth to saturated zone 	 0.00 	I I Poor: I Depth to saturated zone I High frost action I (check lower layers)	 0.00 0.00

Map symbol and soil name	Pct. of	Potential source of topsoil		Potential source of roadfill		
	l map l unit	I (Alaska criteria)		(Alaska criteria)		
		Rating class and limiting features	Value Value	 Rating class and limiting features 	Value 	
153: North Pole	 50 	 Poor: Depth to saturated zone 	 0.00	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
Mosquito	 30 	 Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08	
Liscum	 20 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
154: North Pole	 55 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
Noonku	 25 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
155: Peede	 85 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
156: Peede	 70 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 	
Mosquito	 25 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation	 0.00 0.00 0.08 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.08 	
157: Piledriver	 75 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
158: Piledriver	 50 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	
Eielson	 35 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00	

Table 19.	. Construction Materials: Topsoil and Roadfi	II—Continued
14010 10.	. Construction materials. Topoon and Hoadin	li continucu

Map symbol Pct and soil name of maj unit		Potential source of topsoil	Potential source of roadfill					
		I (Alaska criteria)	l (Alaska criteria)					
		Rating class and limiting features	Value Value	 Rating class and limiting features 	Value 			
159: Piledriver	 50 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00			
Fubar	40 	 Poor: Rock fragment content	 0.00	l Good source	 			
160: Pits, gravel	 100	 Not rated 		l Not rated	- 			
161: Pits, quarry	 100 	 Not rated 		I I Not rated I	 			
162: Riverwash	 100 	 Not rated 		l I Not rated I	 			
163: Salchaket	 85 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 			
164: Salchaket	 45 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone Moderate frost action (check lower layers)	 0.00 0.50 			
Typic Cryorthents	 40 	 Poor: Rock fragment content	 0.00 	 Fair: Moderate frost action (check lower layers)	 0.50 			
165: Saulich	 80 	 Poor: Depth to saturated zone	0.00	 Poor: Depth to saturated zone	 0.00			
		 Content of organic matter No permafrost depth limitation Too acid 	0.00 0.01 0.95	 High frost action (check lower layers) No permafrost depth limitation 	0.00 0.01 			
166: Saulich	 80 	 Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Slope Too acid 	 0.00 0.00 0.01 0.84 0.95	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01 			
167: Saulich	 75 	 Poor: Depth to saturated zone Content of organic matter Slope No permafrost depth	 0.00 0.00 0.00 0.01	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01 			
	I	I limitation	 0.95		1			

Map symbol and soil name	Pct. of	Potential source of topsoil		Potential source of roadfill				
	map unit	I (Alaska criteria)	l (Alaska criteria)					
		Rating class and limiting features	 Value 	 Rating class and limiting features 	Value 			
168: Saulich	40 40 	Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation Too acid	 0.00 0.00 0.01 0.95	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01 			
Minto	40 	Poor: Depth to saturated zone Slope 	 0.00 0.96 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 			
169: Saulich	 40 	 Poor: Depth to saturated zone Content of organic matter Slope No permafrost depth limitation Too acid	 0.00 0.00 0.01 0.95	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.01 			
Minto	 35 	 Poor: Depth to saturated zone Slope 	 0.00 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 			
170: Steese	 80 	 Fair: Depth to bedrock 	 0.79 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 			
171: Steese	 80 	 Fair: Depth to bedrock Slope 	 0.79 0.84 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 			
172: Steese	 70 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 			
173: Steese	 75 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 			
174: Steese	 85 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 			
175: Steese	 90 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 			

Map symbol and soil name	 Pct. of map unit	Potential source of topsoil (Alaska criteria)	Potential source of roadfill (Alaska criteria)				
		I Rating class and I limiting features	 Value 	 Rating class and limiting features 	Value 		
76: Steese	 55 	 Poor: Slope Depth to bedrock	 0.00 0.79 	 Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50		
Gilmore	 25 	 Poor: Rock fragment content Depth to bedrock Slope	 0.00 0.00 0.00	Poor: Depth to bedrock Moderate frost action (check lower layers)	 0.00 0.50 		
77: Steese	 50 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
Gilmore	40 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00 	Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
78: Steese	 50 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
Bilmore	 40 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
79: Steese	 45 	 Poor: Slope Depth to bedrock 	 0.00 0.79 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
Gilmore	 45 	 Poor: Slope Rock fragment content Depth to bedrock 	 0.00 0.00 0.00 	 Poor: Depth to bedrock Slope Moderate frost action (check lower layers)	 0.00 0.00 0.50 		
80: Tanacross	 90 	Poor: Poo::	0.00 0.00 0.00 0.32	 Poor: Depth to saturated zone High frost action (check lower layers) Depth to permafrost	 0.00 0.00 0.00		
181: Tanana	 75 	 Poor: Depth to saturated zone No permafrost depth limitation 	 0.00 0.14 	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation	 0.00 0.00 0.14		

Map symbol Po and soil name o		Potential source of topsoil	Potential source of roadfill					
	l map l unit	l (Alaska criteria)	(Alaska criteria)					
		Rating class and limiting features	Value Value	 Rating class and limiting features 	Value 			
182:		 		 				
Tanana	60 	Poor: Depth to saturated zone No permafrost depth limitation	 0.00 0.14 	Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth	0.00 0.00 0.14			
	i	 	İ	l limitation				
Mosquito	20 	 Poor: Depth to saturated zone Content of organic matter No permafrost depth limitation 	 0.00 0.00 0.08	 Poor: Depth to saturated zone High frost action (check lower layers) No permafrost depth limitation 	 0.00 0.00 0.08			
183: Typic Cryaquents	 30 	 Poor: Depth to saturated zone	 0.00	 Poor: Depth to saturated zone	 0.00			
				High frost action(check lower layers)	0.00 			
Histic Cryaquepts	 25 	 Poor: Depth to saturated zone 	 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00 			
Terric Cryofibrists	 20 	 Poor: Depth to saturated zone Content of organic matter	 0.00 0.00 	 Poor: Depth to saturated zone High frost action (check lower layers) Low strength	 0.00 0.00 0.00			
184:		1			 			
Typic Cryorthents	80 	Good source 		Fair: Moderate frost action (check lower layers)	 0.50 			
185: Typic Cryorthents, fill	 45 	 Poor: Rock fragment content	 0.00	 Fair: Moderate frost action (check lower layers)	 0.50			
Urban land	 45	 Not rated		 Not rated				
186: Urban land	 100	I I Not rated		I I Not rated	- 			
187: Water	 100	I I Not rated		I Not rated				

Table 19.	Construction	Materials:	Topsoil and	Roadfill-	-Continued
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			Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric l soil l	I Local landform	I Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	Meets ponding criteria 	
l01: Bolio (75%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Goldstream (10%)	I Yes	l Ivalley floors	 2B3,3	l I Yes	l No	 Yes	
Lemeta (10%)	Yes	Ifens on terraces	1,3	Yes	I No	Yes	
Chatanika (5%)	l Yes	l Ihills	2B3	I Yes	l No	l No	
Water (0%)	IUnranked	l Idepressions					
02: Bradway (85%)	I I Yes	l I Idepressions	 2B3,3	l I Yes	l I No	I I Yes	
Mosquito (5%)	Yes	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	I No	 Yes 	
North Pole (5%)	Yes	lalluvial flats	2B3,3	Yes	I No	Yes	
Tanana (3%)	l Yes	l Iterraces	 2B3,3	 Yes	l No	Yes	
Noonku (2%)	l Yes	l Isloughs	 2B3,3	 Yes	l No	Yes	
03: Chatanika (75%)	I I Yes	l I Ihills	 2B3	l I Yes	l I No	 No	
Goldstream (10%)	l Yes	l Ivalley floors	 2B3,3	l Yes	I No	Yes	
Chatanika, slopes more than 3 percent (7%)	I Yes	l Ihills	 2B3	 Yes	 No	 No	
Minto (5%)	 No	l Ihills	 	 	 	 	
Saulich (3%)	∣ I Yes	l Ivalley sides	 2B3	l I Yes	 No	l I No	
Histels (0%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Water (0%)	I IUnranked	l Idepressions					
04: Chatanika (75%)	 Yes	l I Ihills	 2B3	l I I Yes	l I I No	l I No	
Chatanika, slopes less than 3 percent (5%)	Yes	l Ihills	 2B3	l I Yes	I I No	I I No	
Chatanika, slopes more than 7 percent (5%)	I Yes	l Ihills	 2B3	l Yes	l I No	l I No	
Goldstream (5%)	I I Yes	l Ivalley floors	 2B3,3	 Yes	l I No	 Yes	
Minto (5%)	 No	l Ihills		 		 	
Saulich (5%)	I I Yes	l Ivalley sides	 2B3	 Yes	l I No	l I No	
05: Chatanika (80%)	 Yes	l l lhills	 2B3	 Yes	 No	 No	
Chatanika, slopes less than 7 percent (5%)	 Yes	l Ihills	 2B3	 Yes	l I No	l I No	
Chatanika, slopes more than 12 percent (5%)	I.	l Ihills	 2B3	 Yes	 No	l I No	
Goldstream (5%)	I	l Ivalley floors	 2B3,3	 Yes	I I No	 Yes	
Minto (5%)	I.	l Ihills			1	1	

Table 20. Hydric Soils List

			Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric I soil I	I Local landform	I Hydric criteria code 	Meets saturation criteria	Meets flooding criteria 	l Meets Iponding Icriteria	
106: Chatanika (80%)	 Yes	i I Ihills	 2B3	 Yes	 No	 No	
Chatanika, slopes less than 12 percent (10%)	 Yes	l Ihills	 2B3	 Yes	 No	l I No	
Goldstream (5%)	 Yes	l Ivalley floors	 2B3,3	 Yes	 No	 Yes	
Minto (5%)	 No	l Ihills	 	 	 	 	
107: Chatanika (55%)	 Yes	l I Ihills	 2B3	 Yes	 No	 No	
Goldstream (35%)	 Yes	l Ivalley floors	 2B3,3	 Yes	 No	l I Yes	
Minto (5%)	 No	l Ihills	 	 	 	 	
Chatanika, slopes more than 5 percent (3%)	 Yes	l Ihills	 2B3	 Yes	 No	l I No	
Histels (2%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Water (0%)	I IUnranked	l Idepressions		 	 	 	
108: Chena (90%)	 No	l Istream terraces	 	 	 	 	
Jarvis (5%)	No	l Iflood plains		 			
Noonku (5%)	Yes	l Isloughs	 2B3,3	 Yes	l No	l I Yes	
109: Dumps, landfill (100%)	I I IUnranked I	l I Isanitary I landfills	 	 	 	 	
110: Dumps, mine (100%)	 IUnranked 	l Ispoil piles I	 	 	 	 	
111: Eielson (80%)	 No	l Iflood plains	 	 	 	 	
Peede (10%)	 Yes	l Idepressions on	 3,2B3	 Yes	 No	 Yes	
Tanana (10%)	 Yes	l flood plains l lterraces	 2B3,3	 Yes	 No	 Yes	
112:							
Eielson (60%)	No	lflood plains	i	i	i	i	
Piledriver (30%)	No	lflood plains		i	 	i	
Fubar (5%)	No	Iflood plains		i	 	 	
Noonku (3%)	I Yes	lsloughs l	3,2B3 	Yes	No	Yes	
Salchaket (2%)	No 	lflood plains I	i	 	i i	 	
113: Eielson (50%)	 No	l Iflood plains			 		
Tanana (35%)	l Yes	l Iterraces	l 2B3,3	I I Yes	I I No	 Yes	
Peede (10%)	l Yes	l Idepressions on I flood plains	 2B3,3 	 Yes 	l I No I	 Yes 	
Tanacross (5%)	I I Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	

	1		Hydric soils criteria				
Map symbol and soil name (percent composition)	 Hydric soil 	I Local landform I I	I I Hydric I criteria I code I	Meets saturation criteria 	Meets flooding criteria 	l Meets Iponding Icriteria	
		l					
		I					
	Yes	Ihills	2B2,2B3	Yes	No	No	
Brigadier (5%)		l					
	No	Ihills					
Ester, rolling (5%)		l					
	Yes	Ihills	2B3,2B2	Yes	No	No	
Ester, very steep (5%)		l					
	Yes	Ihills	2B3,2B2	Yes	No	No	
Gilmore (5%)		l					
	No	Ihills					
Saulich (5%)		l				l	
	Yes	Ivalley sides	2B3	Yes	No	I No	
Steese (5%)	l	l					
	I No	Ihills					
115: Ester (75%)	 Yes	l I Ihills	 2B3,2B2	 Yes	 No	 No	
Brigadier (10%)		l					
	No	Ihills					
Ester, slopes less than 45 percent (10%)		l					
	Yes	Ihills	2B2,2B3	Yes	No	No	
Gilmore (5%)		l					
	No	Ihills					
16: Fairbanks (80%)	 No	 hills	 	 	 	 	
Minto (10%)	l	l					
	I No	Ihills					
Fairbanks, slopes less than 3 percent (5%)		l					
	No	Ihills					
Fairbanks, slopes more than 7 percent (5%)	I	l Ihills	 	 	 	 	
17: Fairbanks (80%)	 No	 hills	 	 	 	 	
Fairbanks, slopes more than 12 percent (10%)	l	l					
	I No	Ihills					
Fairbanks, slopes less than 7 percent (5%)		l					
	No	Ihills					
Minto (5%)	l	l					
	I No	Ihills					
18: Fairbanks (70%)	 No	l I Ihills	 	 	 	 	
Fairbanks, slopes less than 12 percent (10%)		l					
	No	Ihills					
Fairbanks, slopes more than 20 percent (10%)	l	l					
	I No	Ihills					
Minto (5%)	l	l					
	I No	Ihills					
Steese (5%)	l	l					
	I No	Ihills					
19: Fairbanks (80%)	 No	l I Ihills	 	 	 	 	
Fairbanks, slopes less than 20 percent (10%)		l					
	No	Ihills					
Fairbanks, slopes more than 30 percent (5%)		l					
	No	Ihills					
Steese (5%)	l	l					
	I No	Ihills					
20: Fairbanks (85%)	 No	l I Ihills	 	 	 	 	
Fairbanks, slopes less than 30 percent (5%)		l					
	No	Ihills					
Fairbanks, slopes more than 45 percent (5%)		l					
	No	Ihills					
Steese (5%)	 No	l Ihills		 	 		

			Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil 	I Local landform	I Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	l Meets Iponding Icriteria I	
121: Fairbanks, strongly sloping (60%)	 No	l I Ihills	 	 	 	 	
Fairbanks, steep (30%)	 No	l Ihills	 	 	 	 	
Minto (5%)	 No	l Ihills		 			
Steese (5%)	I I No	l Ihills					
122: Fairbanks (55%)	 No	l I Ihills	 	 	 	 	
Steese (30%)	 No	l Ihills	 	 	 	 	
Fairbanks, slopes less than 12 percent (5%)	 No	l Ihills	 	 	 	 	
Fairbanks, slopes more than 20 percent (3%)	 No	l Ihills		 			
Steese, slopes more than 20 percent (3%)	l l No	l Ihills			 		
Gilmore (2%)	I I No	l Ihills					
Steese, slopes less than 12 percent (2%)	I No	l Ihills					
123: Fairbanks (40%)	 No	l I Ihills	 	 	 	 	
Steese (30%)	 No	l Ihills	 	 	 	 	
Fairbanks, slopes less than 20 percent (10%)	 No	l Ihills	 	 	 	 	
Steese, slopes less than 20 percent (10%)	 No	l Ihills		 			
Gilmore (5%)	I I No	l Ihills					
Steese, slopes more than 30 percent (5%)	I No	l Ihills					
124: Fubar (50%)	 No	l I Iflood plains			 	 	
Piledriver (40%)	l l No	l Iflood plains			 		
Eielson (5%)	I I No	l Iflood plains					
Noonku (3%)	I I Yes	l Isloughs	l 2B3,3	I Yes	I No	 Yes	
North Pole (2%)	Yes	lalluvial flats	l 2B3,3	I Yes	I No	I Yes	
125: Gilmore (80%)	 No	l Ihills					
Gilmore, slopes less than 3 percent (10%)	I I No	l Ihills					
Gilmore, slopes more than 7 percent (5%)	I I No	l Ihills					
Steese (5%)	No	l Ihills					
126: Gilmore (70%)	l l No	l I Ihills			 	 	
Gilmore, slopes more than 12 percent (13%)	I l No	l Ihills			 		
Gilmore, slopes less than 7 percent (10%)	l l No	l Ihills					
Steese (7%)	I I No	l Ihills					

	i		Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil 	I Local landform	I I Hydric I criteria I code I	Meets saturation criteria 	Meets flooding criteria	Meets ponding criteria 	
127: Gilmore (75%)	 No	l I Ihills	 	 	 	 	
Gilmore, slopes less than 12 percent (10%)	 No	l Ihills	 	 	 	 	
Gilmore, slopes more than 20 percent (10%)	 No	l Ihills	 	 	 	 	
Steese (5%)	 No	l Ihills			 	 	
128: Gilmore (70%)	 No	l l lhills	 	 	 	 	
Gilmore, slopes less than 20 percent (12%)	I No	l Ihills	 				
Steese (10%)	I No	l Ihills	 				
Gilmore, slopes more than 30 percent (5%)	I No	l Ihills	 				
Ester (3%)	I Yes	l Ihills	 2B2,2B3	 Yes	 No	 No	
129: Gilmore (85%)	 No	l I Ihills	 	 	 	 	
Gilmore, slopes less than 30 percent (10%)	I No	l Ihills	 				
Steese (3%)	No	l Ihills	 				
Rock outcrop (2%)	I Unranked	l Ihills					
130: Gilmore (85%)	 No	l I Ihills	 	 	 	 	
Ester (5%)	I I Yes	l Ihills	l l2B2,2B3	 Yes	 No	l I No	
Gilmore, slopes less than 45 percent (5%)	I No	l Ihills	 				
Steese (3%)	I I No	l Ihills					
Rock outcrop (2%)	I IUnranked	l Ihills					
131: Gilmore (40%)	 No	l I Ihills		 	 		
Ester (40%)	I Yes	l Ihills	l 2B2,2B3	I I Yes	I I No	l I No	
Brigadier (12%)	I No	l Ihills					
Steese (5%)	I No	l Ihills					
Saulich (3%)	I I Yes	l Ivalley sides	 2B3	l Yes	l No	l I No	
132: Gilmore (65%)	 No	l l lhills	 	 	 	 	
Steese (33%)	I No	l Ihills	 				
Steese, slopes more than 15 percent (2%)	I No	l Ihills					
133: Goldstream (80%)	 Yes	l l lvalley floors	 2B3,3	 Yes	 No	 Yes	
Chatanika (10%)	I Yes	l Ihills	 2B3	 Yes	 No	 No	
Histels (5%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Goldstream, slopes more than 3 percent (3%)	Yes	l Ivalley floors	 2B3,3	 Yes	I I No	 Yes	
Typic Cryaquents (2%)	I Yes	l Idepressions	l 3,2B3	 Yes	l I No	 Yes	

		Ì	Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric soil 	I Local landform	I I Hydric I criteria I code I	Meets saturation criteria 	Meets flooding criteria	Meets ponding criteria 	
134: Goldstream (80%)	 Yes	l l lvalley floors	 2B3,3	l I Yes	 No	 Yes	
Chatanika (10%)	l I Yes	l Ihills	 2B3	l I Yes	l I No	l I No	
Histels (5%)	 Yes 	l Idepressions on I terraces, flats I on terraces	 1,3 	 Yes 	 No 	 Yes 	
Minto (5%)	 I No	l Ihills	 	 	 	 	
Typic Cryaquents (0%)	Yes	l Idepressions	 2B3,3	 Yes	 No	 Yes	
135: Goldstream (50%)	 Yes	l Ivalley floors	 2B3,3	l I Yes	I I I No	 Yes	
Histels (45%)	Yes 	l depressions on l terraces, flats l on terraces	1,3 	Yes 	No 	Yes 	
Terric Cryofibrists (5%)	 Yes 	l Ithermokarst I depressions	 1,3 	 Yes 	 No 	 Yes 	
36: Histels (90%)	 Yes 	l l ldepressions on l terraces, flats l on terraces	 1,3 	 Yes 	 No 	 Yes 	
Goldstream (10%)	Yes	l Ivalley floors	 2B3,3	 Yes	 No	 Yes	
137: Jarvis (75%)	No	l l lflood plains			 		
Salchaket (10%)	No	lflood plains					
Chena (5%)	No	I Istream terraces					
Noonku (5%)	I Yes	l Isloughs	 3,2B3	l Yes	l No	 Yes	
Tanana (5%)	I Yes	l Iterraces	 2B3,3	I I Yes	I No	l I Yes	
138: Jarvis (55%)	No	l I Iflood plains		 	 		
Chena (35%)	No	l Istream terraces					
Noonku (5%)	I Yes	l Isloughs	l 2B3,3	 Yes	l No	 Yes	
Salchaket (5%)	I No	l Iflood plains	 	 	 	 	
139: Jarvis (45%)	No	l flood plains		 	 		
Salchaket (45%)	No	l Iflood plains					
Tanana (5%)	I Yes	l Iterraces	 2B3,3	 Yes	 No	 Yes	
Chena (2%)	No	l Istream terraces		 		 	
Noonku (2%)	Yes	l Isloughs	l 3,2B3	l I Yes	 No	 Yes	
North Pole (1%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil 	I Local landform	I I Hydric I criteria I code 	Meets saturation criteria 	Meets flooding criteria 	Meets ponding criteria 	
140: Lemeta (75%)	 Yes	 fens on terraces	 1,3	 Yes	 No	 Yes	
Bolio (10%)	 Yes 	 depressions on terraces, flats on terraces	 1,3 	 Yes 	 No 	 Yes 	
Goldstream (10%)	 Yes	l Ivalley floors	 2B3,3	 Yes	 No	 Yes	
Chatanika (5%)	I Yes	l Ihills	 2B3	 Yes	 No	 No	
Water (0%)	l IUnranked	l Idepressions					
141: Liscum (50%)	 Yes	l alluvial flats	 3,2B3	l I Yes	I I I No	I I I Yes	
Noonku (45%)	Yes	l Isloughs	 3,2B3	 Yes	I I No	 Yes	
North Pole (5%)	l Yes	l Ialluvial flats	 2B3,3	 Yes	I I No	 Yes	
142: Minto (80%)	 No	l Ihills	 	 	 	 	
Chatanika (10%)	 Yes	l Ihills	 2B3	 Yes	 No	 No	
Fairbanks (5%)	 No	l Ihills	 	 		 	
Minto, slopes more than 3 percent (5%)	No	l Ihills					
143: Minto (70%)	 No	l Ihills	 	 	 	 	
Chatanika (13%)	l Yes	l Ihills	 2B3	 Yes	I I No	l I No	
Minto, slopes more than 7 percent (7%)	No	l Ihills					
Fairbanks (5%)	No	l Ihills					
Minto, slopes less than 3 percent (5%)	No	l Ihills					
144: Minto (60%)	 No	l Ihills	 	 	 	 	
Chatanika (10%)	l Yes	l Ihills	 2B3	 Yes	l I No	l I No	
Minto, slopes less than 7 percent (10%)	No	l Ihills	 				
Minto, slopes more than 12 percent (10%)	No	l Ihills					
Fairbanks (5%)	No	l Ihills					
Saulich (5%)	Yes	l Ivalley sides	 2B3	I I Yes	I No	I I No	
145: Minto (45%)	No	l I Ihills			 		
Chatanika (40%)	 Yes	l Ihills	 2B3	 Yes	 No	 No	
Chatanika, slopes more than 3 percent (5%)	l Yes	l Ihills	 2B3	 Yes	 No	 No	
Goldstream (5%)	l Yes	l Ivalley floors	 2B3,3	 Yes	 No	 Yes	
Minto, slopes more than 3 percent (5%)	 No	l Ihills	 	 	 	 	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric I soil I	I Local landform	 Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	Meets ponding criteria 	
146: Minto (40%)	 No	l I Ihills			 	 	
Chatanika (35%)	I I Yes	l Ihills	 2B3	l Yes	 No	l I No	
Minto, slopes less than 3 percent (7%)	 No	l Ihills		 			
Minto, slopes more than 7 percent (7%)	 No	l Ihills		 			
Saulich (5%)	I Yes	l Ivalley sides	 2B3	 Yes	l I No	l I No	
Chatanika, slopes less than 3 percent (2%)	I Yes	l Ihills	 2B3	 Yes	l I No	l I No	
Chatanika, slopes more than 7 percent (2%)	I I Yes	l Ihills	 2B3	 Yes	 No	l I No	
Goldstream (2%)	I I Yes	l Ivalley floors	 2B3,3	 Yes	 No	 Yes	
147: Minto (45%)	 No	l I Ihills	 	 	 	 	
Chatanika (40%)	I	l Ihills	i 2B3	 Yes	 No	i I No	
Minto, slopes more than 12 percent (10%)	I.	l lhills					
Chatanika, slopes less than 7 percent (5%)	I	l hills	 2B3	 Yes	 No	 No	
Typic Cryaquents (0%)	I	l ldepressions	 2B3.3	 Yes	 No	 Yes	
148:							
Minto (45%)	No	lhills					
Chatanika (40%)	l Yes	lhills	2B3	Yes	No	I No	
Minto, slopes more than 20 percent (7%)	No	lhills					
Chatanika, slopes less than 12 percent (5%)	l Yes	lhills	2B3	Yes	l No	l No	
Saulich (3%)	l Yes	lvalley sides	2B3	Yes	l No	l No	
149: Mosquito (85%)	 Yes 	l l ldepressions on l alluvial flats	 2B3,3 	 Yes 	 No 	 Yes 	
Bolio (5%)	 Yes 	 flats on terraces, depressions on terraces	 1,3 	 Yes 	 No 	 Yes 	
Bradway (5%)	l Yes	ldepressions	3,2B3	Yes	l No	Yes	
Liscum (5%)	l Yes	ı lalluvial flats	 3,2B3	I Yes	I No	I Yes	
Water (0%)	IUnranked	ı Idepressions I		 	 	 	
150: Mosquito (45%)	 Yes 	। । depressions on alluvial flats	 2B3,3 	 Yes 	 No 	 Yes 	
Noonku (40%)	l l Yes	l Isloughs	 2B3,3	 Yes	 No	 Yes	
Bradway (5%)	 Yes	l Idepressions	 3,2B3	 Yes	 No	l I Yes	
North Pole (5%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	
Tanana (5%)	I.	l Iterraces	 2B3,3	 Yes	 No	 Yes	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil 	I Local landform	l Hydric l criteria l code l	Meets saturation criteria 	Meets flooding criteria	Meets ponding criteria 	
151: Noonku (80%)	 Yes	l l lsloughs	 3,2B3	 Yes	 No	 Yes	
Liscum (5%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	
North Pole (5%)	ا ا Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	
Tanacross (5%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	 No	 Yes	
Tanana (5%)	I Yes	l Iterraces	 2B3,3	l I Yes	 No	 Yes	
52: North Pole (85%)	 Yes	l I Ialluvial flats	 2B3,3	I I Yes	l I I No	l I Yes	
Tanana (5%)	I Yes	lterraces	l 2B3,3	 Yes	I No	Yes	
Mosquito (3%)	Yes	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	I I No I	 Yes 	
Noonku (3%)	 Yes	l Isloughs	 3,2B3	 Yes	 No	 Yes	
Eielson (2%)	No	lflood plains					
Liscum (2%)	I Yes	l alluvial flats	 2B3,3 	 Yes 	I I No	 Yes	
53: North Pole (50%)	Yes	l Ialluvial flats	 2B3,3	 Yes	l I No	 Yes	
Mosquito (30%)	 I Yes 	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	 No 	 Yes 	
Liscum (20%)	 Yes	l Ialluvial flats	 3,2B3	 Yes	l I No	 Yes	
Histels (0%)	 Yes 	l Idepressions on I flood plains, I flats on flood I plains	 1,3 	 Yes 	 No 	 Yes 	
Typic Cryaquents (0%)	 Yes 	l Iflood plains I	 3,2B3 	 Yes 	l I No I	 Yes 	
54: North Pole (55%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	l I No	 Yes	
Noonku (25%)	I Yes	l Isloughs	l 3,2B3	 Yes	No	 Yes	
Bradway (5%)	I Yes	l Idepressions	l 3,2B3	l Yes	l No	 Yes	
Eielson (5%)	No	l Iflood plains					
Piledriver (5%)	No	l Iflood plains					
Tanana (5%)	Yes	l Iterraces	 2B3,3	l I Yes	I I No	 Yes	
155: Peede (85%)	 	ı l Idepressions on l flood plains	 3,2B3 	 Yes 	 No 	 Yes 	
Mosquito (10%)	 I Yes 	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	 No 	 Yes 	
_iscum (5%)	 Yes	l Ialluvial flats	 2B3,3 	 Yes 	 No 	 Yes	
56: Peede (70%)	I Yes	l Idepressions on I flood plains	 3,2B3 	 Yes	 No 	 Yes 	
Mosquito (25%)	 Yes 	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	 No 	 Yes 	
Liscum (5%)	 Yes	l Ialluvial flats	 3,2B3	 Yes	 No	 Yes	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	I Hydric I soil I	Local landform	I Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	Meets ponding criteria 	
157: Piledriver (75%)	 No	l l lflood plains	 	 	 	 	
Eielson (10%)	 No	l Iflood plains	 	 	 	 	
Fubar (10%)	 No	 flood plains	 	 	 	 	
Tanana (3%)	 Yes	l Iterraces	 2B3,3	 Yes	 No	 Yes	
North Pole (2%)	 Yes	l Ialluvial flats	 2B3,3	 Yes	l I No	 Yes	
58: Piledriver (50%)	 No	l I Iflood plains	 	 	 	 	
Eielson (35%)	 No	l Iflood plains	 	 	 	 	
Fubar (5%)	 l No	l Iflood plains	 	 	 	 	
Noonku (5%)	 Yes	 sloughs	 3,2B3	l I Yes	 No	 Yes	
Riverwash (5%)	l lUnranked	l Iflood plains		 	 	 	
59:	I I		l	1	i I	Ì	
Piledriver (50%)	No	lflood plains	i	i	i	i	
Fubar (40%)	No	lflood plains					
Eielson (7%)	No	lflood plains					
Noonku (3%)	l Yes	l Isloughs	l 3,2B3	I Yes	I No	l Yes	
60: Pits, gravel (100%)	l I IUnranked	l I Igravel pits			 	 	
61: Pits, quarry (100%)	I I IUnranked	l Iquarries			 	 	
62: Riverwash (100%)	l IUnranked	l lflood plains			 	 	
63: Salchaket (85%)	No	l Iflood plains			 		
Jarvis (10%)	 No	l Iflood plains	 	 	 	 	
Fanana (5%)	 Yes	l Iterraces	 2B3,3	 Yes	 No	 Yes	
64:						 	
Salchaket (45%)	No	lflood plains I					
Typic Cryorthents (40%)	l No	lflood plains, l terraces	i	 	 	 	
Jarvis (10%)	No	lflood plains					
Fubar (5%)	l No	lflood plains					
65:					 No	 NI=	
Saulich (80%)	I	Ivalley sides	2B3 0D2 2	Yes Yes	No No	No 	
Goldstream (5%)	I.	Ivalley floors	2B3,3 	Yes 	No 	Yes 	
Saulich, slopes less than 3 percent (5%)	I.	lvalley sides I	2B3 	Yes 	No 	No 	
Saulich, slopes more than 7 percent (5%)	I Yes I	lvalley sides I	2B3 	Yes 	No 	No 	
Chatanika (3%)	Yes 	lhills I	2B3 	Yes 	No 	No 	
Minto (2%)		' lhills	i	I	· · · · ·	, 	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	l Hydric I soil I	I Local landform	I Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	Meets ponding criteria 	
66: Saulich (80%)	l I l Yes	I I Ivalley sides	 2B3	 Yes	 No	 No	
Goldstream (5%)	l Yes	l Ivalley floors	 2B3,3	 Yes	l I No	 Yes	
Saulich, slopes less than 7 percent (5%)	l Yes	l Ivalley sides	 2B3	 Yes	l I No	l I No	
Saulich, slopes more than 12 percent (5%)	l Yes	l Ivalley sides	 2B3	 Yes	l I No	l I No	
Chatanika (3%)	l Yes	l Ihills	 2B3	 Yes	l I No	l I No	
Ainto (2%)	 No	l Ihills					
67: Saulich (75%)	I I I Yes	l Ivalley sides	 2B3	 Yes	I I I No	I I I No	
Ester (5%)	l Yes	l Ihills	l 12B3,2B2	I Yes	I No	l I No	
Goldstream (5%)	l Yes	l Ivalley floors	l 2B3,3	 Yes	l No	 Yes	
Saulich, slopes less than 12 percent (5%)	l Yes	l Ivalley sides	 2B3	 Yes	l No	l I No	
Saulich, slopes more than 20 percent (5%)	l Yes	l Ivalley sides	 2B3	 Yes	l No	l I No	
Chatanika (3%)	l Yes	l Ihills	 2B3	 Yes	l No	l I No	
/linto (2%)	No	l Ihills					
68: Saulich (40%)	I I Yes	l Ivalley sides	 2B3	 Yes	I I I No	I I I No	
Лinto (40%)	No	l Ihills					
Ninto, slopes more than 12 percent (5%)	No	l Ihills					
Saulich, slopes less than 7 percent (5%)	Yes	l Ivalley sides	2B3	l Yes	I No	I I No	
Ninto, slopes less than 7 percent (3%)	No	l Ihills					
Saulich, slopes more than 12 percent (3%)	Yes	lvalley sides	2B3	l Yes	I No	l No	
Chatanika (2%)	Yes	l Ihills	2B3	Yes	I No	l No	
Goldstream (2%)	Yes	lvalley floors	2B3,3	Yes	I No	Yes	
69: Saulich (40%)	I I Yes	l Ivalley sides	 2B3	 Yes	I I I No	I I No	
Лinto (35%)	No	l Ihills					
/linto, slopes less than 12 percent (5%)	No	l Ihills					
/linto, slopes more than 20 percent (5%)	No	l Ihills					
Saulich, slopes more than 20 percent (5%)	Yes	l Ivalley sides	2B3	Yes	I No	I No	
Chatanika (3%)	Yes	l Ihills	2B3	Yes	I No	l No	
Saulich, slopes less than 12 percent (3%)	l Yes	l Ivalley sides	 2B3	 Yes	I I No	l I No	
Ester (2%)	l Yes	l Ihills	l 12B3,2B2	Yes	I I No	l I No	
Goldstream (2%)	I Yes	l Ivalley floors	 2B3,3	I I Yes	I I No	 Yes	

			I Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil	l Local landform	Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	l Meets Iponding Icriteria	
70: Steese (80%)	No	 hills	 	 	 	 	
Steese, slopes more than 7 percent (10%)	No	ı Ihills					
Fairbanks (5%)	No	l Ihills					
Gilmore (5%)	No	l Ihills			 		
71: Steese (80%)	No	hills	 	 	 		
Steese, slopes more than 12 percent (10%)	No	lhills					
Fairbanks (5%)	No	l Ihills					
Gilmore (5%)	No	l Ihills					
72: Steese (70%)	No	l Ihills		 	 	 	
Steese, slopes more than 20 percent (10%)	No	lhills					
Fairbanks (8%)	No	l Ihills					
Gilmore (7%)	No	lhills					
Steese, slopes less than 12 percent (5%)	No	ı Ihills					
73: Steese (75%)	No	l Ihills	 	 	 		
Steese, slopes more than 30 percent (10%)	No	l Ihills			 		
l Gilmore (5%)	No	l Ihills			 		
Steese, slopes less than 20 percent (5%)	No	l Ihills					
airbanks (3%)	No	l Ihills					
Ester (2%)	Yes	l Ihills	l 12B3,2B2	l Yes	l No	l I No	
74: Steese (85%)	No	l Ihills	 	 	 		
Steese, slopes less than 30 percent (10%)	No	lhills			 		
Gilmore (5%)	No	lhills					
75: Steese (90%)	No	l Ihills	 		 		
ailmore (5%)	No	l Ihills					
I Steese, slopes less than 45 percent (5%)	No	l Ihills					
76: Steese (55%)	No	l Ihills			 		
l Gilmore (25%)	No	l Ihills			 		
Gilmore, slopes less than 12 percent (10%)	No	l Ihills					
ا Steese, slopes more than 20 percent (10%)	No	l Ihills					

		i	Hydric soils criteria				
Map symbol and soil name (percent composition)	 Hydric soil 	I Local landform	I Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	l Meets Iponding Icriteria	
177: Steese (50%)	 No	l I Ihills	 	 	 	 	
Gilmore (40%)	 No	l Ihills	 	 	 	 	
Gilmore, slopes less than 20 percent (5%)	 No	l Ihills	 	 	 	 	
Steese, slopes less than 20 percent (5%)	l I No	l Ihills	 	 	 	 	
78: Steese (50%)	 No	l I Ihills	 	 	 	 	
Gilmore (40%)	 No	l Ihills	 	 	 	 	
Gilmore, slopes less than 30 percent (5%)	 No	l Ihills	 	 	 	 	
Steese, slopes more than 45 percent (5%)	 No	l Ihills		 		 	
79: Steese (45%)	 No	l I Ihills	 	 	 	 	
Gilmore (45%)	No	lhills					
Gilmore, slopes less than 45 percent (5%)	I No	l Ihills			 		
Steese, slopes less than 45 percent (5%)	l No	ı Ihills		 	 		
80: Tanacross (90%)	 Yes	l lalluvial flats	 2B3,3	 Yes	 No	 Yes	
Tanana (10%)	Yes	l Iterraces	2B3,3	l Yes	l No	 Yes	
81: Tanana (75%)	 Yes	l Iterraces	 2B3,3	l I Yes	I I No	 Yes	
Bolio (5%)	Yes 	ldepressions on l terraces, flats l on terraces	1,3 	 Yes 	No 	Yes 	
Jarvis (5%)	 No	l Iflood plains		 			
Noonku (5%)	 Yes	l Isloughs	l 3,2B3	 Yes	l I No	 Yes	
Salchaket (5%)	 No	l Iflood plains					
Tanacross (5%)	Yes	l lalluvial flats	 2B3,3	l Yes	l No	 Yes	
82: Tanana (60%)	 Yes	l Iterraces	 2B3,3	 Yes	 No	I I I Yes	
Mosquito (20%)	Yes 	l Idepressions on I alluvial flats	 2B3,3 	 Yes 	I No I	 Yes 	
Jarvis (10%)	I No	l Iflood plains					
Liscum (5%)	l Yes	l Ialluvial flats	 3,2B3	 Yes	l I No	 Yes	
Noonku (5%)	I I Yes	l Isloughs	 3,2B3	 Yes	 No	 Yes	

			Hydric soils criteria				
Map symbol and soil name (percent composition)	Hydric soil 	Local landform 	Hydric criteria code 	Meets saturation criteria 	Meets flooding criteria 	l Meets Iponding Icriteria	
183: Typic Cryaquents (30%)	 Yes 	 depressions on terraces	 2B3,3 	 Yes 	 No 	 Yes 	
Histic Cryaquepts (25%)	I I Yes I	l Idepressions on I terraces	 2B3,3 	Yes 	I No I	 Yes 	
Terric Cryofibrists (20%)	I I Yes I	l Ithermokarst I depressions	 3,1 	 Yes 	 No 	 Yes 	
Histels (15%)	I I Yes	l Idepressions	 1,3	 Yes	l No	 Yes	
Water (10%)	I IUnranked	l ldepressions			 		
184: Typic Cryorthents (80%)	 No	ı I Iflood plains, I terraces	 	 	 	 	
Fubar (5%)	I I No	l Iflood plains			 		
Jarvis (5%)	I I No	l Iflood plains					
Piledriver (5%)	I I No	l Iflood plains					
Salchaket (5%)	I l No	l Iflood plains			 		
185: Typic Cryorthents, fill (45%)	 No	I I Iflood plains, I terraces	 	 	 	 	
Urban land (45%)	I IUnranked	l Iurban land			 		
Salchaket (5%)	I I No	l Iflood plains			 		
Jarvis (3%)	I l No	l Iflood plains			 		
Fubar (2%)	No	l Iflood plains I			 	 	
186: Urban land (100%)	 IUnranked	ı I Iurban land I	 	 	 	 	
187: Water (100%)	 IUnranked	l lakes	 		 	 	

Table 21. Classification of the Soils

Bolio Euic, subgelic Typic Hemistels Bradway Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels Brigadier Loamy-skeletal, mixed, superactive, subgelic Typic Aquiturbels Chena Sandy-skeletal, mixed, superactive, subgelic Typic Aquiturbels Chena Sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents Eielson Coarse-loamy, mixed, superactive, subgelic, shallow Typic Histoturbels Histoturbels Fairbanks Coarse-silty, mixed, superactive, subgelic Typic Dystrocryepts Goldstream Coarse-silty, mixed, superactive, subgelic Typic Histoturbels Fubar Sandy-skeletal, mixed, superactive, subgelic Typic Histoturbels Histo Coarse-silty, mixed, superactive, subgelic Typic Histoturbels Histo Coarse-silty, mixed, superactive, nonacid Histic Cryaquepts Goldstream Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts Liscum Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts Minto Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents North Pole Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents North Pole Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents Piledriver Coarse-loamy, mixed, superactive, nonacid Typic Cryaqu	Soil name	I Family or higher taxonomic class
Brigadier Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts Chatanika Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels Chena Sandy-skeletal, mixed, superactive, subgelic Typic Aquiturbels Chena Coarse-oamy, mixed, superactive, nonacid Aquic Cryofluvents Elelson Loamy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents Ester Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Fairbanks Coarse-silty, mixed, superactive, subgelic Typic Dystrocryepts Goldstream Coarse-silty, mixed, superactive, subgelic Typic Histoturbels Histels Histo: Cryaquepts Histels Histo: Cryaquepts Jarvis Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts Liscum Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts Mosquito Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents Noonku Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents Noonku Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents Noonku Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents Noonku Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryaquents Noorth Pole Coarse-loamy over sandy or sandy-skeletal, mi	Bolio	l l Euic, subgelic Typic Hemistels
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Eielson		
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