176 Newport Road – Suite 8, New London, NH 03257 • Ph 603-877-0116 • Fax 603-526-4285 • www.horizonsengineering.com

December 21, 2020

Town of Bradford Planning Board
East Main Street; P.O. Box 436
Bradford, NH 03221

Re: **Merrimack County Customs – Proposed Machine Shop Site Development – NH Route 114 (Map 3 Lot 7) – Site Plan Review**

Dear Planning Board Members,

On behalf of our client, Allen Revocable Trust, c/o Jason & Sydney Allen Trust, we are pleased to provide the enclosed preliminary plan for the proposed site development located on the Town of Bradford parcel identified as Map 3, Lot 7. Proposed site development is intended for the location of a new welding and fabrication machine shop. Development of the site will include driveway improvements, material and equipment laydown area, and associated grading. The building will be served by private well water and septic system. The proposed machine shop building is approximately 2,850 square feet; the proposed material storage area is 115' x 205'.

The following documents have been included for your review:

- Application Form (5 copies)
- Plans (5 full size (22"x34"), 24 half size (11"x17"; 10+14(abutter copies))
- Abutters List & Mailing Labels (3 sets)
- Tax Map Exhibit
- NRCS Soils Resource Rport
- Preliminary Building Elevation Views

We look forward to discussing this project in January. Please feel free to reach out with any questions.

Respectfully,

Will Davis, PE, LEED AP
Vice President

TOWN OF BRADFORD
APPLICATION FOR SITE PLAN

For Relevant Standards, see both Site Plan Review Regulations and the Town of Bradford Zoning Ordinance

Site: Tax Map 3 Lot 7

Owner of Record ALLEN REV. TRUST
Address c/o JASON D. & SYDNEY L. ALLEN TRUST
135 EAST MAIN STREET, BRADFORD, NH 03221
Phone (603) 848-9353

Applicant SAME AS OWNER
Address 14 Steele Rd Bradford NH 03221 or 14 Steele Rd, Bradford
Phone ___-___-___

Existing Use N/A; VACANT

Proposed Use COMMERCIAL WELDING AND FABRICATION MACHINE SHOP

There is ____ is not ✓ an existing Site Plan for this property.
Existing Site Plan filed under what name ____.
The size of this lot is 28.1 acres.
This lot is in the RESIDENTIAL RURAL/BUSSINESS zoning district.
This plan will ✓ will not ____ require new building(s).
The estimated cost of this project is $200,000.00.
The Applicant is familiar with the Town of Bradford Site Plan Regulations and has complied with it in this application.

APPLICANT _____ DATE 12/22/2020

OWNER OR LEGAL AGENT _____ DATE 12/22/2020

Documents Attached:
Abutters list ✓ Photos or vertical view ✓
Site Plan ✓ Fees ✓
Check #1 - $110 + $1*(150) + (14 abutters)*($4) = $316
Check #2 - $400
Check #3 - $40
Check list(s) ✓ Other ____

3 Separate Checks
Payable to Town of Bradford
Site Plan fees: $110.00 + $1.00 per $1,000 of est. cost over $50,000
Escrow: $400.00 to Town of Bradford
Newspaper notice $40.00

+ Certified Mail cost per abutter payable to Postmaster Bradford

PLANNING BOARD USE ONLY

Date Site Plan Accepted ____/____/____ Fees Received ____ By ____

Date Site Plan Approved/Disapproved ____/____/____ By ____

Conditions: _____

_____

Notice of Decision Sent _____ **Date** ---------_____

CHECKLIST - SITE PLAN REVIEW APPLICATION

In cases where not all items are applicable, draw a line through the items that are not applicable.

*A. APPLICABLE Y/N *B. INCLUDED Y/N *C. INITIALS

*A	*B	*C		
				ALL APPLICATIONS
____	✓	____	1.	**Five (5)** copies of the completed application checklist (III A 1)
____	✓	____	2.	**Five (5)** copies of Site Plan: 22" by 34" sheet size maximum, scale not less than 1" = 100', match lines where needed, date, title, easements, graphic scale, north arrow, location map, name and address of developer/applicant, designer/engineer, owner of record , and signature block for Planning Board approval (III A 2).

At least one full size paper copy must be color coded for clarification:

Lot boundary	red
Trees	green
Roads	brown
Septic a & well radius	orange
Open Space	yellow
Surface water	blue
Wetlands	blue stripe

Sufficient legible copies of the first page of the preliminary plan, reduced to no more than 11" by 17". Ten (10) copies plus one for each abutter. In addition to the physical copies required, one copy of all required submittals shall be submitted in an electronic format (pdf or image file). Submission may be via email or physical media (dvd, USB drive, etc.)

	N/A		3.	A letter of authorization from the owner, if the applicant is not the owner.
____	✓	____	4.	List of current names and addresses of abutters and professionals.
____	✓	____	5.	The appropriate fees (III C)
____	✓	____	6.	Sketch of site showing boundaries, existing natural features within 100" of the site including, but not limited to water courses and water bodies, trees and other vegetation, topographical features, wetlands buffers, limit of jurisdiction of Comprehensive Shoreland Protection Act (CSPA), floodplain, and any other features of a similar nature which should be considered in the site design process.
____	✓	____	7.	Plan of all buildings depicting their type, size, location, lighting, landscaping and setbacks. (V A 2)
____	✓	____	8.	An elevation view or photo of all buildings (V A 3)

____	✓	____	9.	Layout of off-street parking and loading (V A 4)
____	✓	____	10.	Ingress-egress of site and depiction of streets both within and adjacent to site (V A 5)
____	✓	____	11.	Solid waste disposal facilities (V A6)
____	✓	____	12.	Location, size, and design of signs and advertising or instructional devices (V A 7)
____	✓	____	13.	Location, type, direction, and illuminated area of outside lighting (V A 8)
____	✓	____	14.	Water supply and sewage disposal facilities (V A10)
____	✓	____	15.	Lines of all existing adjoining streets (ref. Zoning ordinance;)
____	✓	____	16.	Stormwater Management and control plan (V A II
____	____	____	17.	Other exhibits or data as required (V A. 12)

CHECKLIST - SITE PLAN REVIEW APPLICATION

PROJECTS INVOLVING NEW BUILDINGS OR ALTERATIONS TO THE EXTERIOR DIMENSIONS OF EXISTING BUILDINGS

*A	*B	*C		
CAN SUPPLY IF REQUESTED			17.	Reproducible Mylar, if required (IV A 10)
	✓		18.	Topography at 2' intervals to USGS data (III B 1 b)
	✓		19.	Permanent first floor elevation of proposed buildings (IV B1)
	N/A		20.	Existing water supply and sewage disposal facilities on the site and within 200' of the site, proposed water and sewage facilities, and provisions for expansion of water and sewage facilities (IV B 2)
	✓		21.	Location, elevation, and layout of catch basins and other surface drainage facilities. (IV B 3)
	✓		22.	Existing and proposed contours and finished grade elevations (IV B 4)
	✓		23.	The type, extent and location of existing and proposed landscaping and open space areas indicating what existing landscaping and open space areas will be retained. (IV B 5)
			24.	Gas, electric, telephone, CATV utility lines (IV B 6)
	✓		25.	Boundary survey shown (IV B 7)

OTHER GENERAL STANDARDS

	✓		26.	Description or depiction of proposed grading, filling, or other site preparation (V A)
	✓		27.	Existing and proposed buffers (V B)
	✓		28.	Existing and proposed screening (V C)
CAN SUPPLY IF REQUESTED			29.	Town Engineer inspection (V I)
	✓		30.	Erosion and sedimentation control plan (V E)
	✓		31.	Flood plain and elevations (V I)
CAN SUPPLY UPON APPROVAL			32.	Performance Bond (VIII)

*A. APPLICABLE Y/N *B. INCLUDED Y/N *C. INITIALS

Application # _____

TOWN OF BRADFORD, NEW HAMPSHIRE
REQUEST FOR WAIVER OF SITE PLAN REVIEW REGULATIONS REQUIREMENTS

This form should be submitted with the application for subdivision or site plan review where an applicant requests a modification of any requirement of the regulations. One form should be submitted for <u>each modification</u> request·

Applicant Name _____ Telephone _____

Address _____

_____

Project Location Tax Map and Lot _____

Street _____

The applicant hereby requests a modification of article _____ of the subdivision/site plan regulations of the Town of Bradford.

Description of the regulation to be waived _____

_____

Reason for modification request _____

_____

_____ _____

Applicant Date

Planning Board Action _____

Date _____

SEE ATTACHED

ABUTTERS LIST(as defined in RSA 672:3)
(As indicated in Town records not more than 5 days before the day of filing)

APPLICANT _____ **DATE** _____

Address _____

Complete this form and attach it to the application. Provide 3 copies of mailing labels.

TAX MAP/LOT NO.	NAME	MAILING ADDRESS
	Engineer	
	Land surveyor	
	Soil scientist	
	Applicant	

ABUTTERS AND PROFESSIONALS: Holders of conservation, preservation or agricultural preservation restrictions as defined in RSA 477:15, Engineer, architect, land surveyor, or soil scientist whose seal appears on the plat. Holders of any Easements, Rights of Way (ROW), or Right to Pass are considered Abutters (i.e. .. Utility company)

NOTICE OF DECISION

BRADFORD PLANNING BOARD, BRADFORD, NEW HAMPSHIRE 03221

The application of _____

Location_____

Map_____, Lot_____

Subdivision_____

Site Plan_____

was approved ____ disapproved ____ by the Planning Board on _____

The following conditions to the approval, or reasons for disapproval are attached:

_____

_____

_____

_____

_____
Planning Board

_____
Date

Note: . The conditions of approval must be met within 180 days or the application will be considered null and void. The applicant may request, in writing, an extension.

c.c. Applicant
Code Enforcement Officer
Board of Selectmen
Zoning Board of Adjustment

Abutters List:

Parcel Number	Property Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
02-112-00	17 OLD SUTTON ROAD	KIMBERLY K.VAN DEUSEN	17 OLD SUTTON ROAD	BRADFORD	NH	03221
02-120-00	89 OLD SUTTON ROAD	PATRICK A. & PATRICIA L. MAGISTRO	P.O. BOX 500	BRADFORD	NH	03221
02-121-00	67 OLD SUTTON ROAD	PIERCE, STEPHEN WHITE, LYNDA	67 OLD SUTTON ROAD	BRADFORD	NH	03221
02-122-00	53 OLD SUTTON ROAD	ASHLEY M. & TYLER H. ANDERSON	53 OLD SUTTON ROAD	BRADFORD	NH	03221
02-123-00	41 OLD SUTTON ROAD	MICHAEL W. & DENISE I. HOFFMAN	41 OLD SUTTON ROAD	BRADFORD	NH	03221
02-124-00	35 OLD SUTTON ROAD	MICHAEL L. DEAN	P.O. BOX 183	CONTOOCOOK	NH	03229
03-004-00	2031 STATE ROUTE 114	LAURA J. MARSHALL	P.O. BOX 53	BRADFORD	NH	03221
03-005-00	2043 STATE ROUTE 114	JESSICA L. & SHAWN C. KANGAS	2043 STATE ROUTE 114	BRADFORD	NH	03221
03-006-00	2045 STATE ROUTE 114	RICHARD REV. TRUST, c/o PAUL T. & DIANE S. RICHARD TRUST	P.O. BOX 374	BRADFORD	NH	03221
03-008-00	2107 STATE ROUTE 114	MICHAEL W. & LUCINDA M. DUNN	492 FAIRGROUNDS ROAD	BRADFORD	NH	03221
03-010-00	2084 STATE ROUTE 114	DAVID & PENNY L. ULRICH	P.O. BOX 572	BRADFORD	NH	03221
03-011-00	2068 STATE ROUTE 114	FREDERICK M. SHEPARD	2068 STATE ROUTE 114	BRADFORD	NH	03221
03-012-00	2064 STATE ROUTE 114	WILLIAM C. HESELTON	P.O. BOX 553	BRADFORD	NH	03221
17-012-00	152 EAST MAIN STREET	TOWN OF BRADFORD	P.O. BOX 436	BRADFORD	NH	03221

Consultant List:

Consultant Name	Address	City	State	Zip
GOVE ENVIRONMENTAL SERVICES, INC.	8 CONTINENTAL DR. UNIT H	EXETER	NH	03833
HORIZONS ENGINEERING, INC.	P.O. BOX 1825	NEW LONDON	NH	03257

Property Owner:

Parcel Number	Property Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
03-007-00	STATE ROUTE 114	ALLEN REV. TRUST, c/o JASON D. & SYDNEY L. ALLEN TRUST	135 EAST MAIN STREET	BRADFORD	NH	3221

KIMBERLY K.VAN DEUSEN
17 OLD SUTTON ROAD
BRADFORD, NH 03221

PATRICK A. & PATRICIA L. MAGISTRO
P.O. BOX 500
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CONTOOCOOK, NH 03229

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P.O. BOX 53
BRADFORD, NH 03221

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2043 STATE ROUTE 114
BRADFORD, NH 03221

RICHARD REV. TRUST, c/o PAUL T. & DIANE S.
RICHARD TRUST
P.O. BOX 374
BRADFORD, NH 03221

MICHAEL W. & LUCINDA M. DUNN
492 FAIRGROUNDS ROAD
BRADFORD, NH 03221

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BRADFORD, NH 03221

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P.O. BOX 436
BRADFORD, NH 03221

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ALLEN TRUST
135 EAST MAIN STREET
BRADFORD, NH 03221

GOVE ENVIRONMENTAL SERVICES, INC.
8 CONTINENTAL DR. UNIT H
EXETER, NH 03883

HORIZONS ENGINEERING, INC.
P.O. BOX 1825
NEW LONDON, NH 03257

Tax Map 3, Lot 7

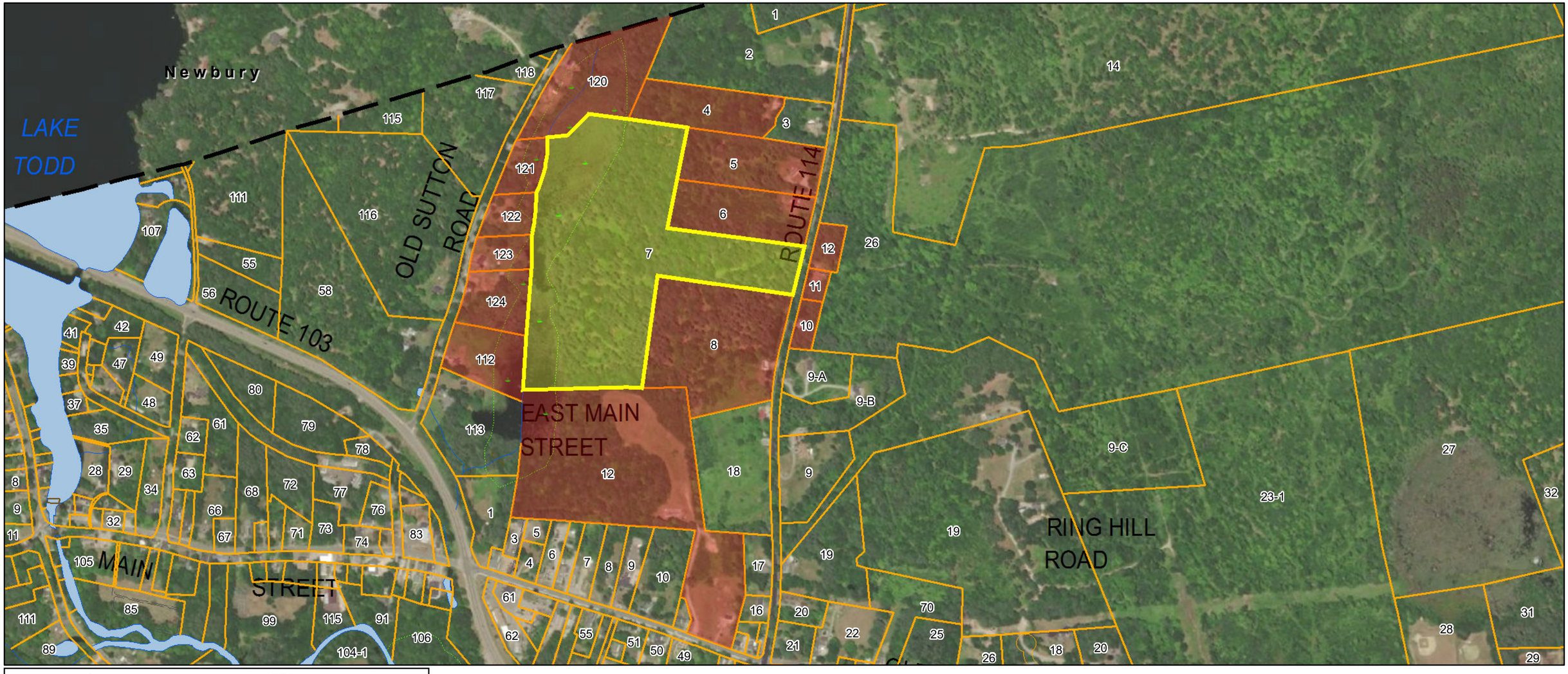
Bradford, NH

1 inch = 550 Feet

0 550 1100 1650

November 30, 2020

CAI Technologies
Precision Mapping. Geospatial Solutions.



Large Scale	PWATER	RW
CAI Town Line	ROAD	WATER
100-PROPERTYLINE	100-HOOKS	WETLAND
400-100PROPERTYLINE	100-RW	Wet Areas
PROPERTYLINE	DAM	Water-poly
PVTRD	HOOKS	

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

United States Department of Agriculture

NRCS

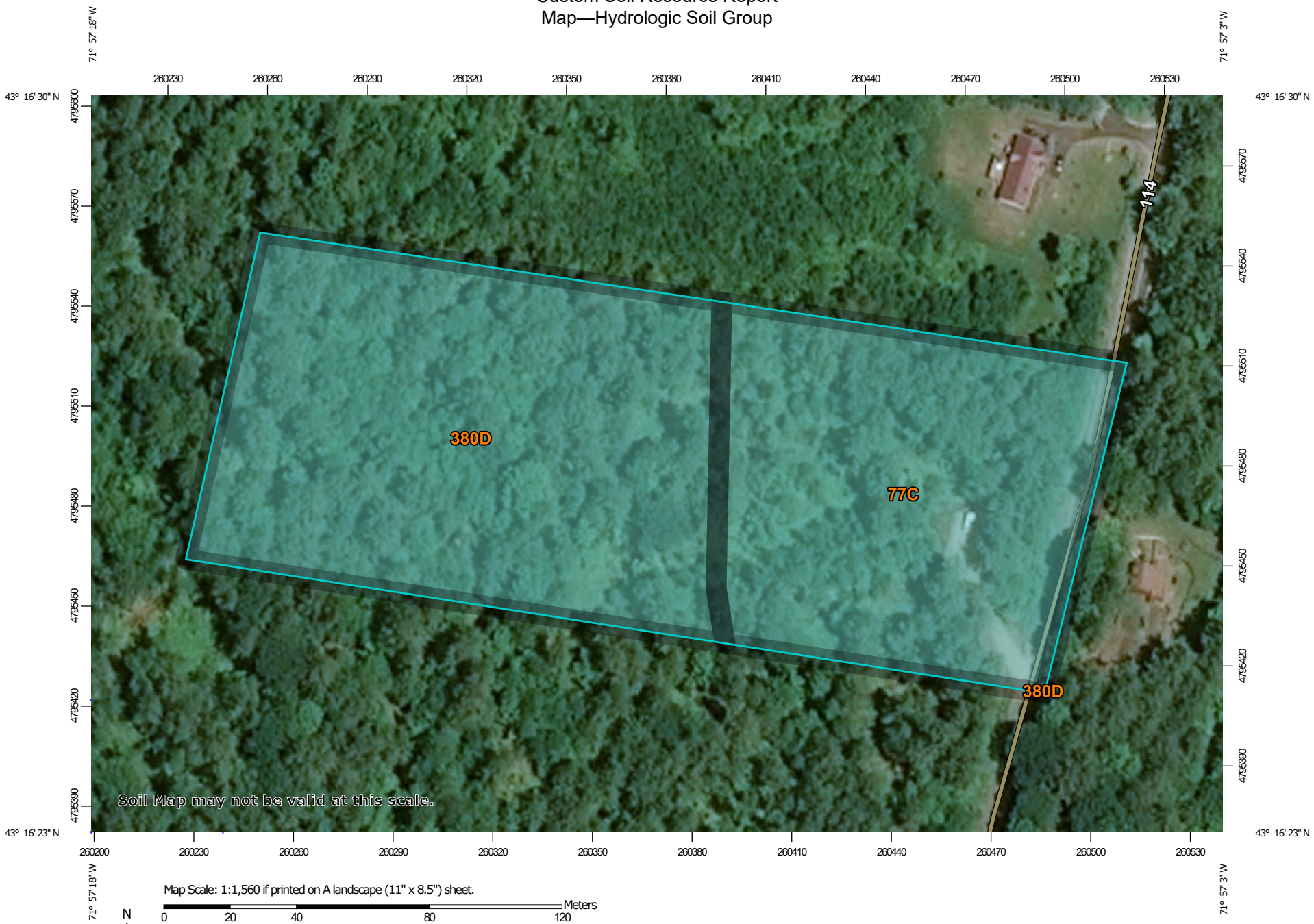
Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Merrimack and Belknap Counties, New Hampshire

December 3, 2020

Custom Soil Resource Report
Map—Hydrologic Soil Group



Map Scale: 1:1,560 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Merrimack and Belknap Counties, New Hampshire
Survey Area Data: Version 25, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 31, 2019—Aug 29, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
77C	Marlow fine sandy loam, 8 to 15 percent slopes, very stony	2.8	42.6%
380D	Tunbridge-Lyman-Becket complex, 15 to 25 percent slopes, very stony	3.8	57.4%
Totals for Area of Interest		**6.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

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 noncontrasting, 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. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. 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 important soil properties and qualities.

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

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

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

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 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. Alpha-Beta association, 0 to 2 percent slopes, is an example.

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

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Merrimack and Belknap Counties, New Hampshire

77C—Marlow fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2ty5p
Elevation: 520 to 1,900 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Marlow, very stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlow, Very Stony

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, mountainflank, side slope, nose slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 5 inches: fine sandy loam
E - 5 to 8 inches: fine sandy loam
Bs1 - 8 to 15 inches: fine sandy loam
Bs2 - 15 to 19 inches: fine sandy loam
BC - 19 to 33 inches: gravelly fine sandy loam
Cd - 33 to 65 inches: fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 20 to 41 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Peru, very stony

Percent of map unit: 6 percent
Landform: Hills, mountains
Landform position (two-dimensional): Footslope, backslope
Landform position (three-dimensional): Mountainbase, mountainflank, interfluve, side slope, nose slope
Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Berkshire, very stony

Percent of map unit: 4 percent
Landform: Hills, mountains
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Mountainbase, mountainflank, side slope, nose slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Tunbridge, very stony

Percent of map unit: 3 percent
Landform: Hills, mountains
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Mountainbase, mountainflank, side slope, nose slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Pillsbury, very stony

Percent of map unit: 2 percent
Landform: Hills, mountains
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainbase, mountainflank, side slope, nose slope, interfluve
Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

380D—Tunbridge-Lyman-Becket complex, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2xk0n
Elevation: 390 to 1,640 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

Tunbridge, very stony, and similar soils: 35 percent
Becket, very stony, and similar soils: 25 percent
Lyman, very stony, and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tunbridge, Very Stony

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Shoulder, backslope, summit
Landform position (three-dimensional): Mountainflank, side slope, crest, nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or mica schist and/or phyllite

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
Oa - 3 to 5 inches: highly decomposed plant material
E - 5 to 8 inches: fine sandy loam
Bhs - 8 to 11 inches: fine sandy loam
Bs - 11 to 26 inches: fine sandy loam
BC - 26 to 28 inches: fine sandy loam
R - 28 to 38 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water capacity: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Becket, Very Stony

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, side slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgment till derived from granite and gneiss and/or schist over sandy lodgment till derived from granite and gneiss and/or schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
E - 2 to 4 inches: fine sandy loam
Bhs - 4 to 5 inches: fine sandy loam
Bs1 - 5 to 7 inches: fine sandy loam
Bs2 - 7 to 14 inches: fine sandy loam
Bs3 - 14 to 24 inches: gravelly sandy loam
BC - 24 to 33 inches: gravelly sandy loam
Cd - 33 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 21 to 43 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Lyman, Very Stony

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Shoulder, summit, backslope
Landform position (three-dimensional): Mountainflank, side slope, crest, nose slope
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or mica schist and/or phyllite

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loam
E - 3 to 5 inches: fine sandy loam
Bhs - 5 to 7 inches: loam
Bs1 - 7 to 11 inches: loam
Bs2 - 11 to 18 inches: channery loam
R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 11 to 24 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Monadnock, very stony

Percent of map unit: 4 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, side slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Skerry, very stony

Percent of map unit: 4 percent
Landform: Hills, mountains
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainflank, side slope, nose slope, crest
Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Convex, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Rock outcrop

Percent of map unit: 4 percent
Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Mountainflank, crest, side slope, nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: Unranked

Moosilauke, very stony

Percent of map unit: 3 percent
Landform: Hills, mountains
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Mountainflank, crest, side slope, nose slope
Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes